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EDITOR'S DESK

Adult learning occurs in a great many settings and in a great many ways. It is indeed fitting that the first book reviewed in this issue is Jenny Rogers' famous work, *Adults learning* – the fourth edition of this timeless work of art. It sets the tone for the papers in this issue of the Journal. In the book, Rogers acknowledges that many aspects of life have changed over the thirty years since her first edition, but that the fundamentals remain much the same: "The effective teacher of adults has only one motto: 'Learners first'". In reviewing the book, **Penelope Nelson** calls it "this vivacious handbook ... [which] deserves every success".

In this issue, we examine adult learning in many of its forms – adult learning by seniors grappling with the Internet, adult learning in a rapidly changing society to create a Knowledge Nation, adult learning promoted by ACE Boards, adult learning as transformative experience for Puyuma Aborigines in Taiwan, adult learning within competencybased training for the unemployed, and adult learning in completing traineeships.

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Two papers focus on learning via the Internet by seniors who have not grown up with computers and are at risk of being marginalised in a technological society. Sue Kilpatrick and June Hazzlewood construct a typology of such adult learners according to their pattern of use, identifying four main types who progress at different rates depending on training opportunities, time constraints, needs and interests. They claim that an understanding of how seniors learn using the Internet will enable more effective training programs and support services to be developed, and help to promote older people's continued active engagement in life in general. June Hazzlewood in a second article details, in the Year of the Volunteer, a number of community projects in northern regional Tasmania that link government and non-government volunteers at every level of involvement from project instigation and management, fund-raising and sponsorship to on-going daily support. It is a record from a personal perspective, showing how initiatives can catalyse others to create ripples within a community pond, however small.

Two papers discuss adult learning more from a political perspective. **Carmen Lawrence** (her address to the ALA National Conference late in 2000) discusses the role of such learning in our rapidly changing world and, in particular, Labor's ideas on how to create a Knowledge Nation. She defines what she means by a Knowledge Nation and outlines its key characteristics. Crucially, it involves lifting the education levels and skill standards of the whole community, not just of the fortunate ones, to lead to a fairer nation of empowered people and communities engaging in lifelong learning. She highlights the adult and community education (ACE) sector as having one of the most valuable roles to play, as it is "a tangible example of learning beyond the classroom". ACE provides "some of the important social glue that holds our communities together", serves as "a bridge for many people to further career-related study" and offers " the first step for many Australians to gain education, skills and independence". That is why, she argues, ACE is "a vital part of the 'Knowledge Nation' and why we think it should be properly supported". **Gene Wenham**, complementing the Victorian paper by Martin and Jones in the previous issue of this journal, explains how ACE Boards foster and promote adult learning. Referring to the South Australian situation, she outlines many examples of the ACE Board's recent activities "to ensure that people from all backgrounds and circumstances share access to the knowledge, skills and understanding they need to participate fully and successfully in the community" as stated in its Strategic Plan 2001–2003.

Two other papers shift the focus on adult learning in the vocational education and training sector. Tilahun Afrassa investigates factors influencing the completion of traineeships, employing multilevel analysis on student and provider data sets to illustrate hierarchical linear modelling (HLM) techniques. From his sample of learners who commenced their traineeships in 1997 in South Australia and whose training provider could be identified (913 learners and 20 providers), he singles out several factors at both levels that affect learners' completion or otherwise of their contracts of training. Derek Kosbab concentrates on the learning experiences of 60 unemployed adults in the Certificate IV in Small Business Management (New Enterprise Incentive Scheme) in Victoria. The participants were positive about their learning within the competency-based training (CBT) program, and this paper illustrates by means of direct quotes why this type of program appeared to suit their circumstances. The two most discussed factors by the learners were that CBT was "the strongest learning experience they had yet encountered" and "how they came to understand so much about themselves and how empowering this was to them".

This theme of transformative learning is also elaborated by **Ying Lee** in her paper on six prominent Puyuma tribal members in Taiwan. The study indicates that contacts between indigenous and non-indigenous

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people for a hundred years have brought the indigenous culture to a state of near extinction. The interviewees' experience shows that, through transformative learning processes, they attempted to transcend their 'stigmatized identity', as well as come up with adaptive means to confront external circumstances through 'academic existence', 'cultural existence' and 'vital existence'. And in the final essay by **Cliff Baxter**, the author argues for learners being more informed about the actual process of learning if they are to have any chance of obtaining equity and justice. He also contends that selfdirectedness can combat what he sees as "the increasing tendency for top-down decisions, academic elitism, educational financial famines and attempts to reduce learning to technological functionalism".

This issue ends with six book reviews coordinated by **Peter Willis** and a number of scans by **Michele Simons** of interesting articles in other journals.

Roger Harris Editor

From Window Shopper to eSenior: Seniors learning online

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This paper presents findings from a joint project by the University of Tasmania and Telstra Research. It explores learning via the Internet by persons over 55 who have not grown up with computers and are at risk of being marginalised in a technological society. Two semistructured interviews were conducted with each of 21 seniors. The participants were categorised into four largely sequential groups according to their pattern of Internet use, 'Window Shoppers', 'eMailers', 'Searchers' and 'eSeniors'. Window Shoppers, Searchers and eMailers are potential eSeniors and are moving at different rates towards this group, depending on training opportunities, time constraints, needs and interests. Motivation to access the Internet came mainly from a desire to keep in touch with family and friends. Retirement provided the opportunity and prompt to get online for many. Training was an integral part of the early Internet journeys of almost all the sample. Support as people tried new skills on the *Internet assisted people in their learning.*

Introduction

The number of seniors in the Australian population is growing. Most older people, especially those old enough to reside in Retirement Units and Nursing Homes, have not used computers and the Internet as part of their work or daily lives. These people represent a growing market segment for Internet services. As more and more people expect to participate in lifelong learning, the number of seniors looking to acquire new knowledge and skills will grow. Very little research exists to date on how older people use technology and the Internet in learning. For example, are there differences in attitude, learning style and access opportunities according to chronological age? What is the role of support and training in seniors' Internet learning? An understanding of how seniors learn using the Internet will enable more effective training programs and support services to be developed for seniors. It will also provide indicators of ways of promoting older people's continued active involvement in life in general.

This paper reports the results from semi-structured interviews with 21 seniors in Launceston, Tasmania which uncover information about factors influencing their access to the Internet and how they use the Internet to learn new knowledge and skills for use in their lives.

Lifelong learning

Lifelong learning is a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments (Kearns 1999: *viii*).

In a recent report to Adult Learning Australia, Candy (2000) reports that the amount of new information, the complexity of systems and the range of new technologies all require continuous updating and The role of formalised learning in the form of education and training in those functions that require adaption to change is well established (Kilpatrick 2000; Chapman and Stemp 1992). However, the role in the change process of informal learning that occurs in the workplace, the home and the community is less well researched. Cranton (1994) suggests that change can be triggered by new information which conflicts with an individual's previously accepted knowledge. A learning process follows during which values change and the new information is accepted.

Interactions and sharing knowledge and skills are learning as described by Jarvis (1987). Learning is the 'process of transforming experience, of one kind or another, into knowledge, skills, attitudes, values, senses [and] emotions'. The learning experience involves a 'direct interaction with other people, talking with them, watching their behaviour', learning from others' experiences, trials and errors and putting it into practice for themselves in a way that 'the individual tries out a procedure and finds that it works and can be repeated' (Jarvis 1987: 90). Learning in this sense is informal and experiential.

Seniors, learning and the Internet

The third age of active retirement gains recruits through redundancies and early retirement and from the fourth age, previously designated as dependency, as advances in medicine and self-regulation of health promote mental and physical 'wellness'. As more and more people expect to participate in lifelong learning, the number of seniors looking to acquire new knowledge and skills will grow (ANTA 2000). Lifelong learning is becoming a real option as a hedge against boredom as older people are being given the opportunity to access computer technology for a variety of purposes. There are health and social benefits for older people from electronic contact with others (Braxton 1999). In an evaluation of a U3A online project, Swindell and Vasella (1999) note there is a growing recognition of the demoralising effects of social isolation, particularly within the older sector of the community. Buys (1998) found that health had little impact on older adults' participation in learning computer skills and using the Internet but that learning programs may significantly increase their interest and confidence.

The Internet offers many opportunities for accessing information and interaction with others to learn new things. The training and support available for discovering how to use computers and the Internet is not always suitable for older people who on average have a lower level of education and lack of exposure to technology and may have agerelated impairments (Manheimer, Snodgrass and Moskow-McKenzie 1995). However, seniors should not be stereotyped as technophobes or passive dependents, rather they should be seen as informed consumers (Scott 1999).

Researchers have found little difference in uptake and use of the Internet by seniors according to age or gender (Scott 1999; Williamson 1997; Manheimer *et al.* 1995). However, older women who had little opportunity for education beyond compulsory school leaving age are flocking to Internet training and are using the Internet to make up for missing formal education (Barnett, Buys and Adkins 2000).

This study identified four typical patterns of Internet use through which seniors tend to move sequentially. The stages on that learning journey and factors that influence its speed are described in this paper, following an outline of the methodology and an overview of the characteristics of the four groups and the uses they make of the Internet.

Methodology

The research design was qualitative, which is suitable for a study such as this which investigates possible relationships and influencing factors for seniors using the Internet. Sample selection was a purposeful sample of seniors aged 55 years plus living in Launceston, Tasmania. People were invited to take part through flyers in the Online Access Centre, at community meetings and in residential care facilities and notices in various newsletters aimed at seniors. Funding for the project limited the size of the sample to approximately 20 seniors. Those who expressed an interest in participating were telephoned and brief demographic and computer use characteristics ascertained. From the 40 people who expressed an interest in participating, 21 were selected to include a sample with a combination of the following characteristics:

- males and females,
- people living independently and residents of a nursing home,
- people aged 55 to 69 and aged 70 plus,
- those with home computers, home Internet access and those without, and
- new computer users (two years or less) and those with more experience.

All but one of the sample had a home computer or shared access in a nursing home. Thirteen had a home Internet connection. It is likely that the recruitment method has biased the sample toward those who have tried the Internet. We acknowledge that barriers to Internet use found in this study will not represent the full range of barriers present in the seniors' community in general. For example, those with attitudinal barriers to computers and/or the Internet are unlikely to have responded to the invitation to participate. As well, those who do not participate in computer or seniors' groups and so do not read the newsletters used to recruit participants are not represented in the sample and may have different barriers to Internet use (for example, literacy, financial or physical disabilities). Data were collected from two semi-structured interviews with each participant. The interviews were audio-taped and took between one and one and a half hours each for the first interview and half an hour to one hour for the second. The second interviews, held five months later, checked that the interpretation of the researchers was consistent with the meaning of the participants (as advocated by Yin 1994), ascertained changes in Internet use since the first interview and collected further information based on analysis of the first interviews. Interviews were transcribed and analysed for themes with the aid of NUD*IST qualitative data analysis software. NUD*IST allows single passages of text to be coded to any number of particular themes and for patterns of themes to be analysed (Burns 2000). NUD*IST was used for some aggregation of responses and cross-tabulations to 'get a picture' of the data (Stake 1995).

A typology of seniors in cyberspace

The characteristics of Internet use and attitudes to the Internet of each participant were analysed. From inspection of the data, an apparently sequential pattern of Internet learning – use of email, searching, and in some cases establishment of own webpages – emerged. The seniors appeared to fall into four groups: 'Window Shoppers', ' eMailers', 'Searchers' and 'eSeniors'. The characteristics of these groups are summarised in Table 1. It must be noted that this typology has been developed from a small sample and needs to be tested in a larger study.

Table 1: Characteristics of the four groups

Window Shoppers

- novice Internet users or potential users
- lacking Internet access and/or support at home
- need help with email and searching
- cautious about privacy/security
- most plan to follow up training and support options

eMailers

- regularly check email from family and friends with confidence
- most introduced to Internet via family insisting on email contact
- most do some searching but are limited by time, lack of awareness or expertise
- gradual Internet exploration as interest, time and money permit
- future plans include training to extend Internet use

Searchers

- started as eMailers, communicate with family and friends
- competent computer and Internet searchers
- some aspire to eSenior ranking, others content in 'cruise control'
- Internet journey progress is rapid for a few, gradual for most
- future goals include advanced training as time permits

eSeniors

- confident, expert and frequent users of multiple aspects of the Internet
- have or plan personal or community webpages
- understand computer and Internet equipment and specifications
- no barriers to using Internet banking and e-commerce
- most have plans for advanced courses for example, in web design

The Window Shoppers are relatively new users of the Internet, or are seriously contemplating getting started. They are yet to develop confidence and discover the potential of the Internet for their lives. Window Shoppers tend to have had less than one year of computer experience at the time of the first interview (Table 2).

Computer experience		less than	Two years to less than five years		Total
Window Shopper	5	2		1	8
eMailer	1	1	2	2	6
Searcher	1	1	1	1	4
eSenior		1	1	1	3

Two of the Window Shoppers are nursing home residents and, while keen to be involved, were dependent on a shared computer and volunteer assistance to use it. The third nursing home resident in the sample is older than these two, but has her own computer and Internet connection and despite multiple disabilities is an avid participant in adult education computer courses. She is included in the Searcher group.

Use of information from the Internet

The main continuing use of the Internet for most people is sending and receiving email, followed by searching for specific information such as health information and genealogy, and searching for information on interests and hobbies or surfing for leisure. While ten of the seniors had looked for information on prospective purchases, only two had actually purchased online (one a travel booking overseas, the other items delivered to her home). Table 3 shows details.

Table 3: Internet uses by group

Use	Typology Wi Sh	ndow lopper	eMailer	Searcher	eSenior	Total
Email		4	6	4	3	17
Informatio	on and learning	1	6	2	3	12
(including	health)					
Leisure		3	2	3	3	11
(hobbies a	nd surfing)					
Shopping	(including for	4	2	2	2	10
travel, not	necessarily					
online pur	chase)					
Communi	ty involvement	1	3	0	3	7
(emailing	minutes,					
newsletter	rs, organisation					
web sites)						
Financial	and business	0	1	1	2	4
Chat and o	liscussion	1	0	0	1	2
Number in	n group	8	6	4	3	21

Email is used extensively to link family members. A wide variety of information is accessed, for communication (for example, the white pages), leisure (for example, sports sites and holiday destinations), shopping, financial information, health, as well as to help others and to learn (for example, about family history, other countries and new recipes). As confidence and skills increase, Internet banking and shopping are more likely to be tried and early caution about security lessens as the benefits are seen. The next learning curve begins as personal and community home pages and websites are created by eSeniors, who then start a new cycle of learning by formal training and/or self-directed effort. eMailers and eSeniors send and receive emails either everyday or at least three times a week. The Window Shoppers and the Searchers vary in their emailing habits, with differences largely depending on whether family and friends are on the net. Searchers are frequent users of the Internet to source information, either using known addresses or browsing and following links. The distinction between Searchers and eMailers is somewhat blurred – many of the eMailers are competent searchers, but do not search as frequently as those classified as Searchers. eMailers tend to have less free time for searching on the Internet, mostly due to leisure and community activities or family commitments. eSeniors make regular and extensive use of the Internet and apply the information and knowledge gained for personal and community benefit. Some of the eSeniors have their own web pages.

There is little relationship between Internet use, as represented in the typology, and age or gender. Neither was there any discernable relationship between any of the individual factors that are encompassed in the groups (such as frequency and kind of Internet use) and age or gender. The three eSeniors are all female aged 55 to 69 and two left school early, however the small sample size means that no conclusions can be drawn from this.

Outcomes from learning on the Internet fell into two broad categories – social (overcoming isolation, and communication with friends and family) and benefits from ready access to information for managing finances, shopping for holidays and other things, health and assisting with community-related activities.

Window Shoppers, Searchers and eMailers are potential eSeniors and are moving at different rates towards this group, mainly depending on training opportunities, time constraints, needs and interests, as explained in the next section.

The Internet journey

Over three-quarters of the interviewees said they had no or very little idea of the scope of the Internet and its potential relevance when they first became aware of its existence. Email and genealogy were often mentioned in early awareness remarks. By the second interview, all the interviewees had tried the Internet, including email and searching. The initial anxieties confessed by most of the interviewees disappeared with introductory training sessions and support from family and friends. Some of the interviewees admitted being curious but 'terrified' at first, but after gaining confidence, soon took 'going online' for granted. Learning to send and receive emails was usually the first skill attempted, followed by searching.

I decided to use the net as a means of sending and receiving emails. A kind neighbour is quite computer literate, helped me to install the program, and to get going with email... I did attend sessions at... the online centre... I learnt quite a bit from the people that help in there, and they showed me how to find various sites on the net (male eMailer, 70+ years).

Having time to spare and removal of work-based computer access following retirement, the need to communicate with family and friends, wanting to keep up with younger people, peers and new technology generally and an increasing awareness and appreciation of the ease of obtaining information all played a part in motivating seniors to access and continue to use the Internet.

[Husband] used it at work and used to look up our cycling site... so we said we wanted our own computer and we wanted to be able to look things up (female eSenior, 55–69 years).

The majority of those who had become eMailers were motivated to learn or improve their Internet skills by family members who were moving interstate or overseas for work or travel. Family motivators and support ranged from gifts of 'hand-me-up' (Scott 1999:23) or new computers to support and assistance to those purchasing or upgrading 164 Sue Kilpatrick and June Hazzlewood

existing equipment. Some learnt to use email to keep in touch with family and friends when they were travelling themselves.

It was through our son who lives in Hobart. He had organised to get us a computer and sometime later he suggested it would be a good idea if we had a hotmail address because he was going to go overseas, so that was the first time I knew anything about the Internet (female Searcher, 55–69 years).

The journey of Internet discovery has been a gradual one for most of the seniors in this study. Of the eight Window Shoppers, only three had been introduced to the Internet more than twelve months before the interviews. Affordability was a barrier to further Internet experience for the three 'long term' Window Shoppers, two of whom needed to upgrade computers for access. Two of the Window Shoppers were prevented from moving on by insufficient support for connecting to the Internet in their nursing home environment. Three, including one of the long term Window Shoppers, were waiting for a home Internet connection. One of the interviewees had made very rapid progress in the five months between interviews. This senior shows how motivation can quickly move someone from being a Window Shopper to an eMailer then Searcher:

1st interview: Over the years since I've retired... I have more time... I have relatives overseas, I've got relatives all around Australia, and when I get the PC eventually, that's what I'll use it for, plus picking up news and all sorts of things from around the world.

2nd interview: Now in that time [since the first interview] I bought a PC... I've been to classes in adult education for the over 55s. I'm on the Internet and looking around a bit. I'm on email and I've got more email addresses than I ever thought was possible (male, 70+ years).

Seniors who had made rapid progress in the twelve months prior to the second interview had all, like the senior quoted above, purchased new computers and acquired Internet connections in that period. Having home Internet access appeared to be the major contributing factor in their progress, however training played a significant role. This senior describes how she learnt to use email, search for family history information and post notices on the ABC community website:

I had a lesson at the online centre, the genealogical society had a lesson there... I went to TAFE... a flexible learning course. That was wonderful... you can just go when you are able to... There's always someone to help you (female eMailer, 55–69 years).

Most of those who made gradual progress had also attended some training which was a contributing factor in their progress. Awareness of the possibilities of the Internet for shopping and personal business tended to come after familiarity with email. This woman had used email for several years at an online access centre, but is only now discovering other uses for the Internet as a result of a TAFE course.

I'm half way through doing the basic Internet users course, which I'm finding really interesting, a lot of things I didn't know (female eMailer, 55–69 years).

Lack of access to appropriate training and support was a barrier on the Internet journey of some of the Window Shoppers:

I tried to use the Internet down at the college, I didn't,... the helper [was busy], everybody was wanting to get onto it and you'd get so far and you couldn't go any further (male Window Shopper, 70+ years).

Some of the eMailers were competent searchers, however others seemed to be unaware of the extent of information and possible uses of the Internet. Those seniors who were actively involved in community affairs, many of whom were classed as eMailers, cited time constraints as a barrier to progress on their Internet journeys. Searchers are more confident users of email and other aspects of the 166 Sue Kilpatrick and June Hazzlewood

Internet. They tended to have done more advanced training courses than Window Shoppers or eMailers, and had practised their searching skills. This Searcher summarises her Internet learning journey and explains how she uses the Internet at a public access centre:

I did a course up at school for Seniors which was an introduction to computing prior to getting a computer... then from that, it just sort of went on... I've done two or three courses up there... for me it's been a sort of a gradual progression I think and a gaining in confidence more than anything else.

We planned a bus trip that we did through Europe and we did that from here, and all the bookings and everything were fine... We're getting photographs of the grandchildren over the e-mail... and a bit of Internet banking I do as well... We've got friends all over the world and if there's a particular thing that I want to look up I will, but by the time I answer the emails that have come in and so on, the hour just goes like that (female Searcher, 55–69 years).

About a third of the seniors interviewed were self-directed learners, learning mainly by trial and error with some attendance at formal courses and/or informal assistance from family and friends. The eSeniors tended to love learning, and enjoyed teaching themselves. The three in the study were motivated by a desire to learn new things.

We just went on, we just bought the computer, they brought the modem up, we just went in online and we just fiddled around and found sites that we liked and away we went (female eSenior, 55–69 years).

Training and support

Almost all of the seniors had attended training sessions or courses, and as indicated in the previous section, training and support appeared to speed the Internet journey. Some had bad experiences at training. These mainly related to insufficient one-on-one time from the tutor and insufficient time for practice. Training computers that were set up differently from computers at home inhibited application at home. Other seniors found courses had too much material and were too long for their stage of development.

I did a 10 week course which was very good and we learnt everything from sending emails to printing, editing and all about the font... I got too much too quick... when you're 84 you can't take in everything as quick as you might have done when you were young (female eMailer, 70+ years).

Family and friends were sources of support for some in the very early stages of their journey, but all who had moved from being Window Shopper had participated in training or extensive independent exploration and learning. Public access points are accessible and affordable places for beginners to learn how to use the Internet, to establish its usefulness and for the one-on-one support provided by staff and volunteers.

I try and go in there [Online Centre] about for an hour at least once a week and that's very good, in that there's always help available (female Searcher, 70+ years).

Group sessions for beginners in the same location were not successful for those with little or no previous computer experience:

In the sessions I took part in, it was a muddle, because some people were coping better than others... but I did find that using the Internet in this training session... I was able to get a lot of information about the places I'm going to visit in Europe, that was helpful (female Window Shopper, 70+ years).

The seniors who started at an online centre often went on to learn more from formal courses including TAFE, Adult Education and School for Seniors. Most participants readily identified their learning styles as look, listen and do, they valued handouts and made their own notes for further reference as they practise new skills. I write notes a lot, and I never ever will remember things totally and I learn best on my own... even though I'm a social person... I enjoy lectures, and I can learn from them but when I go away and it's me with my notes... that's when I learn (female eMailer, 55–69 years).

Overall, most people were enthusiastic about their training and plan to do more courses.

Conclusion

The seniors in this study show that age is not a barrier to lifelong learning and successful use of the Internet. The diversity of interests and successful transfer to new information and communication technology shown by the subjects of all ages and both genders challenge the stereotypes of ageing. The study supports the findings of some researchers (Scott 1999; Williamson 1997; Manheimer *et al.* 1995) that differences in attitude, learning styles and opportunities and the right support at the right time are more significant than chronological age.

Motivation to access the Internet came mainly from a desire to keep in touch with family and friends. The opportunity or prompt to act was most often retirement or travel (either by a family member or by the senior). Affordability was an issue for those in the sample on limited incomes, however this did not prevent those who were highly motivated from purchasing computers and home Internet connections.

Training was an integral part of the early Internet journeys of almost all the sample. Support as people tried new skills on the Internet assisted people in their learning. This is consistent with Buys (1998) who found learning programs increase interest and confidence. Training sessions that tried to teach too much too soon and did not include the opportunity for practice were detrimental. Public access points influence seniors' journeys by creating awareness of the Internet, being affordable and providing training and support. Single workshop style learning environments that are available as people need them are effective for most.

Lifelong learning outcomes for seniors online are those which match their life stages, needs, aspirations and physical, social and economic circumstances. Not all seniors will want to becoming an eSenior, or even benefit from doing so. Training and support can and should help people set and reach individualised goals.

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Learning for life: Adult education in Australia

Dr Carmen Lawrence, MP Federal Member for Fremantle

Let me state from the outset that education has long been a serious interest of mine, whether as student, educator or in public office. As a former Education Minister, I have spent a great deal of time delving into education and its place in our society, and in particular, examining the education that occurs once individuals leave the schools and colleges of childhood and youth behind, and seek other forms of learning and skill development.

My views are similar to those enunciated by John Ralston Saul. He said that public education is the "single most important element in the maintenance of a democratic system. The better the citizenry as a whole are educated, the wider and more sensible public participation, debate and social mobility will be... Highly sophisticated elites are the easiest and least original thing a society can produce. The most difficult and the most valuable is a well-educated populace."

I would like to talk today about the role of such learning in our now rapidly changing world, and to discuss some of the ideas that Labor is developing as part of our plan to create a Knowledge Nation.

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Firstly, it might be valuable to comment on the nature of this rapid transformation that is occurring across the industrialised world. It is now apparent that the world is undergoing yet another industrial and social revolution, led by advances in information and communications technology. This is reshaping our lives and shifting the traditional socio-economic equations that underpin our existence as a community. This revolution is sometimes characterised as the driver of the so-called knowledge industries with the capacity to generate substantial economic growth and improvements in civil society.

At the same time, there is a risk that some people and communities will be left behind, without access to the skills or the new tools of commerce and communication. It is becoming apparent that some of the less well off, the elderly and members of rural and remote communities are becoming isolated, both economically and socially, from new information and services being offered online. This also denies them access through the new media to higher education, vocational training and the worlds of the arts and sciences.

Once again, as we have so many times before, Australia stands at an important social and economic crossroad. International pressure is mounting for economies to embrace technological change in order to participate in the global information revolution or risk being left behind as "branch economies". Traditional policy approaches to managing such change, particularly in the areas of education, industry and innovation, are becoming increasingly inadequate as the emerging new economy creates enormous opportunities and challenges for our great nation.

It is for this reason that we in the Labor Party are firmly committed to the task of creating a Knowledge Nation. When people think of how we meet the challenge of becoming a Knowledge Nation, they often think of high technology research and development in areas like supercomputing and biotechnology. These things are of course important, but they are not the whole story. To try and define the Knowledge Nation is not easy, not least because it literally affects every area of policy and every sector of society! I contend that we are all what we learn! But, at the risk of being overly general, here is an attempt to describe the Knowledge Nation concept in one sentence:

"It's a self-confident nation of highly skilled and educated people who improve the quality of their lives and expand opportunities for all by applying knowledge to industry, government, improving social wellbeing and solving environmental challenges."

Such a Knowledge Nation would have a number of characteristics. It would:

- create new industries in emerging fields such as biotechnology, information technology and green technologies, and promote innovation through increased research and development effort and improved commercialisation of new ideas;
- make every school state and non-government a centre of excellence;
- have world-class post-secondary education opportunities that attract the world's leading researchers and teachers, and provide opportunities for our own highly trained graduates;
- apply knowledge to eliminate social inequality, improve health levels and tackle environmental issues like the salinity and greenhouse challenges;
- be a more efficient user of technology and resources;
- promote tolerance among its people through knowledge, understanding and communication; and
- expand the reach and variety of adult and community-based learning opportunities.

Lastly, and perhaps most importantly, a Knowledge Nation provides all of its citizens with the opportunity to improve their skills and

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gain a secure and well-paid job through properly funded vocational education and lifelong learning programs. This last point is crucial.

Creating a Knowledge Nation requires lifting the education levels and skills standard of the whole community, not just those fortunate enough to be able to afford expensive non-government schools, not just research scientists, not just the university educated, and not just the young. Everyone. In the Knowledge Nation, education will have to start earlier in life, continue throughout life, and be of a higher quality than ever before.

This has been well understood for a decade now since the release of Robert Reich's seminal book, *The work of nations*. Reich pointed out that giving individuals and communities opportunities to get a good education and to be able to retrain to meet the demands of the changing economy is the best way to create a fairer society. This is why we say that the Knowledge Nation must also be a fairer nation. And the key to achieving this lies in empowering people and communities to engage in lifelong learning.

Earlier this year, Kim Beazley and Cheryl Kernot released a key report by the Monash Centre for Policy Studies called *Workforce 2010*. The Report demonstrated that the only way to beat the scourge of unemployment in Australia is to invest in skills, innovation and education. Only in that way can we increase national productivity, make the transition to a new economy and meet new and growing areas of skill shortages.

Over the next ten years we are going to see greater demands for people with skills in areas such as the sciences, human services, retail trade, health, education, welfare, property and business services. The *Workforce 2010* Report pointed out that at least four out ten of these new jobs created in the next ten years will require a higher degree of some kind and that virtually none of the new jobs created will go to people without post-secondary education or training. The shape of our workforce, and therefore our society, will have to change dramatically to meet these demands. Constant learning, therefore, is as much a key social issue as ever.

Tragically, just when increased investment in education is most needed, we are going backwards. Recent OECD figures show that Australia's expenditure on education is 4.3% of GDP (we are 24 out of 28 nations) compared with the OECD average of 5.1%. Given that currently only about 15 per cent of the Australian workforce has a degree level qualification, and that Australia has a relatively low rate of participation in vocational education and training compared with other OECD nations, the task we face is enormous. But this challenge has been met before.

The Hawke and Keating Governments managed to increase dramatically the number of Australians with post-secondary education.

- university graduate numbers increased from 348,000 in 1983 to 634,000 in 1996.
- the number of people in vocational programs, including TAFE, increased from 880,000 in 1986 to nearly 1.3 million in 1995.

Our challenge is the same as that met by the previous Labor Governments and, unless we succeed, our economy will be held back and we will experience skills shortages in crucial areas. We know, for instance, that there are currently more than 30,000 unfilled jobs for information technology (IT) workers in Australia due to skill shortages. This is retarding our economy and our society. The figure is forecast to grow every year, especially as many other countries, such as the United States and Singapore, have migration schemes designed to poach Australian graduates and are producing many more IT graduates than we are. There are shortages of other professionals such teachers, especially in maths, science and IT, research mathematicians, childcare workers and other health and welfare professionals. Today we are witnessing the rapid transformation of the international market for skills. Competition for those skills is becoming ferocious. The 'brain drain' is a reality – our brightest and best are leaving in great numbers for the opportunities and benefits offered by alternatives to life in Australia. Young Australian of the year Gaensler observed that the phrase 'clever country' is now used ironically and that he could not contemplate returning to Australia because of the inadequate resources devoted to research. It is becoming a case of educate or perish. We have to educate faster and better just to stay in the same place.

But the demand for skills goes further than university graduates alone. The *Workforce 2010* research found that our economy will need more highly trained people in all sorts of areas that do not require a university degree but higher-level vocational skills in areas such as sales, marketing, retail and hospitality. This means more people undertaking apprenticeships and more people re-training and re-skilling during their working lives. On top of this, we have a growing problem of unemployment among workers as young as forty and many in their fifties and sixties whose skills are no longer in demand in a rapidly changing economy.

This level of re-training and re-educating simply cannot be achieved without a greater effort in adult learning because becoming a Knowledge Nation requires us to re-skill everybody of all ages, not just the young.

The Coalition believes that the answer to the education question lies in enhancing the unregulated competition of the education sector. It is Dr Kemp's answer to just about every question. The Government is trying to redefine public education as a commodity in the marketplace rather than as a public good. Their policies are to channel more resources into elite private schools at the expense of state and low-fee non-government schools and to increase the cost of training and higher education. This is fine if we want to create a small, highly educated and trained elite, but it will not help us become a Knowledge Nation. Over 50% of the extra \$700 million to go to private schools will go to the richest Category 1 schools who service only a third of the private school enrolments.

In contrast, Labor believes that Government has a crucial role to play in developing the knowledge sectors of our economy. First, we need better schools for everyone. The Labor Party has nothing against non-government schools; in fact, we created the needs-based funding system during the Whitlam era. But we do believe that public resources must be better targeted. When the Howard Government came to power in 1996, 43% of federal funds were spent on Government schools. Four years later, that figure has been reduced to 35%.

Creating opportunities for all begins with properly funding our state schools and low-fee non-government schools, not wasting scarce resources on schools that already give their children an advantage. That's why we have moved amendments to Dr Kemp's school funding bill to divert \$145 million dollars over four years into properly funding special education for children with disabilities. We will be using the next two weeks of Parliament to pressure the Government to accept our amendments to make the Bill fairer. If they do not accept those amendments, we will make the issue a key focus of the next election.

Second, we must ensure that post-compulsory education and adult education is affordable. Recently the *Sydney Morning Herald* reported that in NSW and the ACT applications by mature-age students have fallen by 25 per cent since the Howard Government effectively doubled HECS fees and reduced the repayment threshold in 1996. The Coalition's solutions are taking us backwards. Imagine what the impact will be if Dr Kemp is given the chance to implement his plan to deregulate university fees and replace HECS with loans at market rates of interest. At a time when Australia needs more highly educated and trained people than ever before we would see a massive

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decline in enrolments and a contraction in the nation's future skills base. Clearly, making education too expensive for the majority of people is not the answer to Australia's skill shortages. Labor opposes the deregulation of tertiary fees. We believe in keeping university studies affordable and we believe in properly funding university research and university infrastructure.

Thirdly, we need to properly fund vocational education and training (VET) so that growth and quality are compatible. Like our universities and schools, our vocational education and training system has also suffered. The Senate Employment, Workplace and Relations, Small Business and Education References Committee has recently handed down an excellent report into the quality of vocational education and training in Australia. It paints a picture of an excellent system facing ongoing funding pressures. The Report found that the euphemistically titled "growth through efficiencies" policy imposed on the Australian National Training Authority by the Howard Government has affected the ability of our national VET system to deliver quality training outcomes for Australians.

While efficiencies are always possible, how long can we continue to expect growth to be unfunded without lowering quality? The Senate Report found that quality assurance needed to be boosted to ensure that training providers and courses were properly accredited and of the highest quality. And it found that the breadth of skills being handed down in programs such as New Apprenticeships were being narrowed and focused insufficiently on core competencies and skills that are transferable between enterprises. As I mentioned earlier, education and training not only need to continue longer throughout life, they have to be of a higher quality.

Fourth, we need to identify areas of skill deficiency so that education resources can be well targeted. Many industries, individuals and communities are at risk due to the changing economy and the need for new types of skills. Rather than sit by and wait for factories to close and whole communities to be thrown out of work, we need to renovate our existing industries and give employees of declining industries the new skills they may need to enter into other forms of work. To achieve this, Labor will establish a *National Workforce Forecasting Council* and conduct *Workforce Skills Audits* to identify communities and industries at risk and match them to re-training opportunities in areas of skill shortages. For instance, the New South Wales Government has successfully retrained many retrenched engineers from the steel and mining industries in the Hunter Valley as maths and science teachers to help meet the demand for those skills in our schools.

Fifth, we need a strong community education sector and the resources to support it. The community education sector, to which many of you proudly belong, has perhaps one of the most valuable roles to play. It is a tangible example of 'learning beyond the classroom'. Neighbourhood houses and community learning centres provide some of the important social glue that holds our communities together. They host important health, personal development and counselling services. They provide parenting advice and help, promote multicultural awareness and act as a source of enjoyable and useful courses and activities.

Importantly, the Adult and Community Education (ACE) sector acts as a bridge for many people to further career-related study, through, for example, language courses for migrants, literacy courses and computer skills training. The importance of adult and community education in providing the first step for many Australians to gain education, skills and independence is too often overlooked. That is why adult and community education is a vital part of the Knowledge Nation and why we think it should be properly supported.

It does not help to cut back on funds to the ABC, degrading the range and quality of productions on Radio National and News Radio, for example. Instead, we should be enhancing the education possibilities for the ABC and resourcing programs like the learning circles in 180 Carmen Lawrence

Sweden and working women's learning groups which have proved successful in southern Europe. Central to Labor's policies in respect to this will be to ensure that public investment in that sector is at least comparable with that of leading OECD economies.

We intend to promote an innovation culture. This requires a quality public education system and a strong public voice for education. It means we must identify the impediments to and drivers of the applications of new technologies and increase our business R&D effort to at least the OECD average. We must ensure that our education and training sectors meet the skill needs required by a knowledge-based economy.

The question now is whether the Government has the will and the wit to act with the necessary sense of urgency and priority to put Australia on the "new economy" map. Labor certainly has.

About the author

This paper was originally presented as an address to the 40th National Conference of Adult Learning Australia in Canberra in November 2000.

Dr Carmen Lawrence is currently the Shadow Minister for Industry, Technology and Innovation, the Shadow Minister for the Status of Women and the Federal Member for Fremantle in the Federal Parliament.

Adult Community Education Boards promoting adult learning

Gene Wenham, AM Chair, Adult Community Education Council, South Australia

At the 1999 Adult Learning Australia Conference, keynote speaker Rev. Tim Costello quoted Robert Kennedy's words:

The gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile.

Since the report *Come in Cinderella*, the dawning has awakened governments to the value of a learning society or community, but not necessarily for economic reasons alone – equality of opportunity, selfesteem, confidence, quality of life, pathways to further education – in short, a community in which all have a chance to reach their full potential.

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The South Australian Government in 1994 proclaimed the Vocational Education Employment Training (VEET) Act and embodied within that Act was the establishment of the Adult Community Education Council. The composition of the Council reflects the diversity of any given community, and although members have been appointed as individuals and not representatives of any organisation or sector, the broad spectrum of need is reflected in their experience – disabilities, unskilled workers, clients with low self-esteem, career counselling, rural re-skilling, aged and infirmed.

Council members are appointed for a two-year term and since 1994 we have 'educated' four different Ministers. Currently we are now under the portfolio of the Minister for Youth, Employment and Training and Water Resources, the Honourable Mark Brindal.

The Council direction since inception was reinforced when the Delors Report, *Education into the 21st Century*, encompassed learning under the four pillars:

- learning to do
- learning to know
- learning to be
- learning to live together

With the emphasis on the last pillar, Dr Brendan Nelson, Federal Liberal Member in New South Wales, stated:

What good will it do us to connect every young Australian to the Internet if we are incapable of building a sense of community recognising that in a world of fundamentalist intolerance, uncertainty and instability what we need most is one another.

Through an excellent management Unit, our Council has directly been involved in:

• *Employee Development Program* involving members of the South Australia Police

- *Small Business Project* to encourage adult and community education (ACE) providers to broaden their client base to include small business in their local area
- *ACE and Schools* to help increase participation of community members in schools and more importantly increase confidence among adult learners to participate in information learning activities
- *Regional Development Grants* for innovative projects of a collaborative nature incorporating regional approaches to delivery
- *Interactive CD ROM*, an award winning guide to the Internet; the product was developed in conjunction with Interact New Media and is now utilised through the NetWorks for You in a project which relates to Internet update in regional South Australia
- Seniors Link to Learning Voucher of \$25; this initiative was to encourage seniors aged over 55 to 'come and try' a learning activity in a range of ACE venues. The University of the Third Age was the biggest winner in delivery of programs. The overall concept was supported by the Department of Education, Training and Employment as an International Year of the Older Persons initiative and launched during Adult Learners Week
- *Turning on Learning Communities* project was funded by the Australian National Training Authority to research and establish a framework for development of successful communities learning and living together.

During 1999, some 7,400 students undertook ACE programs delivering 320,000 student hours of education and training for a budget of \$600,000.

The ACE Council has been totally supported by the Chair and members of the VEET Board. We have participated in visits to regional and rural areas in South Australia with the Board, as well as visits to industry and roundtable discussions over futuristic communities such as Mawson Lakes north of Adelaide. Our 'reverse' tours, where we have acquainted VEET Board members with work in the community, brought a greater level of support and acclaim for our work particularly amongst disadvantaged communities.

South Australia is an easy State in which to network and my appointment by Premier Olson to the Centre for Lifelong Learning Advisory Council has enabled discussions at a higher level of the needs and aspirations of adult community education.

As stated in our Strategic Plan 2001–2003, adult community education will be shaped by shifts in the learning needs and demands of the communities in South Australia to ensure that people from all backgrounds and circumstances share access to the knowledge, skills and understanding they need to participate fully and successfully in the community. Let me share a few examples:

The *Overseas Chinese Association* was established in the 1960s by a group of Indo-Chinese refugees. It has developed from a small group of people supporting each other and running a Chinese school for twenty children in a garage to a current estimated 2000 members, learning English and teaching Mandarin Chinese to Australians.

Adult Learners Week Awards 2000 – a successful businessman whose life dramatically changed following a severe motorcar accident. This man was left in a coma for months and spent three years in rehabilitation at the Julia Farr Centre. The Eastwood Community Centre has great support networks for people with disabilities. Three years on and this man is now an active member of the centre, he has established art classes and encourages others to take up art. Furthermore, he is now undertaking art classes with his daughter at the Adelaide Arts Centre.

There are many more individual stories of confidence gained through informal learning in the community, all of which create pathways to further education often enabling small business initiatives, a confident person and a secure future. With a recent increase in funding through a supportive State Minister, the ACE Council is currently reviewing its grant distribution systems and looks forward to increasing opportunities throughout the community to encourage lifelong learning.

About the author

This paper was originally presented in a workshop at the 40th National Conference of Adult Learning Australia in Canberra in November 2000.

Ms Gene Wenham is the Chair of the Adult Community Education Council in South Australia.

A study of the transformative learning process among prominent Taiwan Puyuma Aborigines

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This research has two main purposes; first, to understand the Taiwanese indigenous people's transformative learning processes, that is, how they transcend the limitations of their ethnic status and background and how they confront the impact of mainstream culture and modernity; and second, to understand the indigenous peoples' perspective on their tribal historical transition and future development based on their communal concerns and the outcome of praxis.

The theoretical framework for this research is derived from relevant theories developed by Jean Piaget, Lev Vygotsky, Jurgen Habermas, Jack Mezirow, Pierre Bourdieu and Paulo Freire. The analytical framework includes three aspects of transformative learning: instrumental, communicative and emancipatory. Collected data are based on the life history of six prominent Puyuma tribal members.

Analyses of their transformative processes reveal that there are two communal thematic concerns: (1) ethnic identity and relations among indigenous and non-indigenous people; (2) the impact of external forces, such as the imposed education system, on their language and culture. The study indicates that contacts between indigenous and non-indigenous people for a hundred years have brought the indigenous culture to a state of near extinction. The interviewees' experience shows that, through transformative learning processes, they attempted to transcend their 'stigmatized identity', as well as come up with adaptive means to confront external circumstances through 'academic existence', 'cultural existence' and 'vital existence'. The research recommends that the specificity of indigenous cultures be recognized and considered in educational reforms.

From the perspective of world history, Columbus 'discovered' the New Continent in 1492, which indicated the beginning of the period of colonization that lasted for over five centuries. ... However, raising issues on aborigines ends the myth of Columbus' discovery and predicts a new era of world history. The recent challenge that we face is this: How to reestablish a multi-cultural society built on justice and equality that can respond to the human needs of a new partnership. (Taiwan Indigenous Voice Bimonthly, Vol. 2, p.6)

Culture is a dynamic process that consists of the continuity from the past, and it is also a living phenomenon of contemporary people. To understand an ethnic group's development and future possibilities, it is necessary to deduce from the life history of contemporary tribal representatives. This might seem an oversimplification; however, taking the aborigine's subjective experience is an attempt to challenge

the enduring paradigm based on the perspective of the dominant culture. In addition, through the dialogue between the dominant paradigm and the aboriginal experience, one can examine prejudices and different perspectives in the process of knowledge construction. The outcome of this investigation can enhance a more comprehensive and inclusive interpretation of the social, historical and cultural issues of the aborigines, as well as contribute to the reconstruction of a new partnership.

Research purposes and methodology

In Taiwan, recent governmental policies on aborigines are oriented toward multiculturalism. However, many studies (Sun 2000; Foundation of Taiwan Indigenous Development 1999; Mao 1996; Association of Taiwan Indigenous Cultural Development 1993) indicated that the long assimilation process undergone by the aborigines compelled them to confront the dominant culture, while facing the collapse of their traditional social systems and the threat of their own cultural extinction. Furthermore, their living conditions (education, socio-economic status, political participation, etc.) have been coerced into the lowest level in society. Consequently, the negative impact on the aborigines' ethnic identity, social adaptation and participation is quite evident.

Thus the research has two main purposes: first, to understand Taiwan indigenous people's transformative learning processes, that is, how they transcend the limitations of their ethnic status and background, and how they confront the impact of mainstream culture and modernity; and second, to understand the indigenous people's perspective on their tribal historical transition and their future development based on their communal concerns and praxis.

The most recent census shows Taiwan's population at 22 million, of which 400,405 people are recognised as indigenous. Language, culture, social structure and physique categorised officially Taiwan's indigenous people into nine sub-groups: the Amis, Atayal, Paiwan, Bunun, Puyuma, Tsou, Saisiyat, Rukai, and Yami. Since the study is qualitatively conceived and analyses the life history of limited subjects, it is necessary to choose only one sub-group – the Puyuma. The research procedures include:

- Step 1: selection of six representatives to be the subjects, through 'focus group' discussion of Puyuma tribal members
- Step 2: data collection by using in-depth interviews and textual analyses of relevant materials, including biographies, artifacts, written and oral discourses
- Step 3: transcription and analyses

Theoretical Framework

The theoretical framework of this research is derived from relevant theories developed by Jean Piaget, Lev Vygotsky, Jurgen Habermas, Jack Mezirow, Pierre Bourdieu and Paulo Freire. The analytical framework includes three aspects of transformative learning: instrumental, communicative, and emancipatory (see Figure 1).

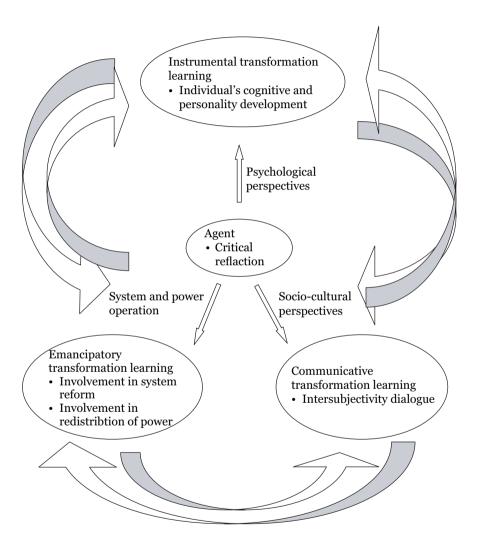


Figure 1: Theoretical framework of transformative learning

Different aspects of transformative learning

1. Instrumental transformation learning

Jean Piaget affirms that the human is a developing organism, not only in a physical, biological sense, but also in a cognitive sense. According to Piaget, learning is the mechanism of equilibration (a dynamic process of self-regulation) between individual and environment. Cognitive disequilibration due to encountering new experiences incongruent with the individual's previous frame of reference may cause a transformation of individual's cognitive structures to become more inclusive (Piaget 1977; Fosnot 1996).

Beyond the biological perspective of Piaget, Lev Vygotsky goes further and focuses on the dialectic between the individual and social, and the effect of social interaction, language, and culture on learning. An individual's cognitive structure cannot be understood without observing it interacting in a context. All cultures represent the meaning of experience in some way, through symbols and media such as language, film, music, art, etc. Learning is a constructive building process of meaning-making that results in reflective abstractions, producing symbols within a medium. Individual thought progresses toward culturally accepted ideas ('taken-as-shared' meanings) but always in an open dynamic structure capable of creative innovation (Vygotsky 1986; Fosnot 1996).

However, Piaget and Vygotsky's constructivist views on learning emphasise the individual's adaptation to the existing societal structure, but neglect the agency of ethics, social control and power operation intertwined in the evolving socio-historical human world, which was the main target of Marxists' and other sociologists' criticism.

2. Communicative transformation learning

Responding to the challenge of Marxism concerning the emergence of 'alienation' and 'power domination' in the process of modernisation and capitalisation, Jurgen Habermas proposes his theory of 'communicative action' based on 'intersubjectivity dialogue'. For Habermas, the phenomenon of 'domination' derived from power manipulation is not desirable, since communication is systematically distorted. Therefore, Habermas asserts that humans possess 'emancipatory interest' for the purpose of transcending this hegemonic power relationship (Habermas 1990, 1984).

Based on Habermas' arguments, Jack Mezirow builds his transformative learning theory. For Mezirow, learning is the process of using a prior interpretation to construct a new or a revised interpretation of the meaning of one's experience in order to guide future action. Transformative learning is the process within which an individual constructs a more fully developed frame of reference that is more inclusive, differentiating, permeable, critically reflective and integrative of experience (Mezirow 1991, 1994, 1996).

What Mezirow fails to do, however, is maintain the essential link between the meaning of experience and the context in which it arises and by which it is interpreted. Furthermore, he fails to explicate exactly what role a context has in this learning process. Mezirow's theory was derived from a study of women's re-entry programs in community colleges in the United States. He not only neglected the historical, contextual analysis of the programs that began during the 1960s, an era of general racial, political and philosophical changes in American life, but he also omitted to examine the impact of hegemonic cultural values reflected in it. Consequently, Mezirow's appeal to ideal conditions, which removed context from an interpretation of experience, may restrict personal reflection on the individual and cannot attain Paulo Freire's 'problematization of the oppression' (Clark & Wilson 1991).

3. Emancipatory transformation learning

For Paulo Freire, learning for emancipation is a collective activity, which has as its goal social and political transformation. If personal development takes place, it does so within that context. But this process involves social structures rather than individuals (Inglis 1997). Humans are by nature rule-generating and rule-following organisms. Within a context, contextual influences act on and shape individuals, however, individuals remain active agents of transforming the context by undertaking collective praxis on rules, structures, systems and the power intertwined among them (Freire 1994). In the same vein, Pierre Bourdieu attempts to explain how historical and situational contexts act on individuals while individuals still have the possibility and potential to transform their history by the concepts of 'field', 'habitus', 'capital' and 'power' (Bourdieu 1994, 1990).

Findings and discussion

A. Description of the subjects

Living on the plains in Taitung County in Eastern Taiwan, the Puyuma numbers slightly more than 10,000. Through 'focus group' discussion, the Puyuma tribal members were requested to recommend their prominent representatives. From the primary representative group, six subjects were selected on the basis of their diverse age range, occupation and gender (see Table 1).

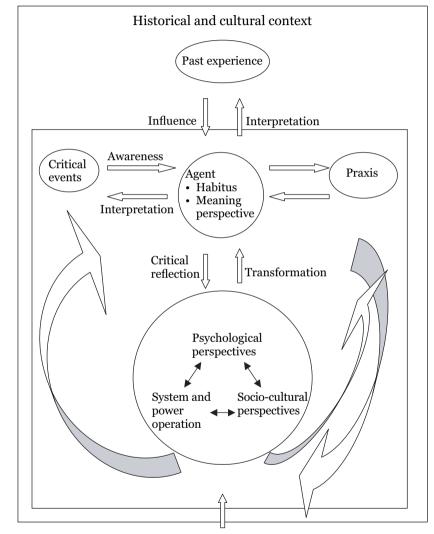
Table 1: Characteristics of the Subjects

Subjects	sex	age	Occupation	Reasons for being recommended
S1	male	54	County major	outstanding achievement in the
				political field
S2	male	48	College lecturer	outstanding academic and
				cultural contribution
S_3	female	62	retired teacher;	outstanding contribution in the
			NGO head	revival of tribal culture
S4	male	55	Catholic bishop	outstanding contribution in the
				cultural and religious domains
S_5	male	63	Farmer,	outstanding achievement in
			community leader	cultural affairs
S 6	male	58	Woodcarver,	outstanding performance in the
			tribal leader	arts and culture

Based on the discussion of the focus group, several criteria were used to select tribal representatives. These criteria may indicate the unique world view of the Puyumas, which enables us to better understand their values and needs. The criteria are: (1) endeavor to transmit traditional culture; (2) having certain valuable achievements affirmed by the mainstream society; (3) being a role model for the tribal group; (4) capable of attracting external attention on indigenous issues; and (5) ability to promote tribal prestige.

B. Transformative learning process

Learning occurs throughout the individual's life-span. From the analyses of the subjects' life histories, their transformative learning processes are summarized and illustrated in the following chart (see Figure 2). Transformation learning is a non-linear process, and it is manifested as transactional loops. However, three elements (critical events, critical reflection and praxis) are essential in the transformation learning process.



Situational context

Critical events (triggering events)

According to Bourdieu, 'habitus' is an individual's internalisation of the ethnic group's normative value system, which affirms communal experiences and consolidates the group's boundary and identity. 'Habitus' also shapes the individual's interaction with the outside world, which in normal circumstances remains unperceived and unexamined, until the occurrence of a critical event incongruent with one's previous experience. These critical events are often the triggering point for transformative learning processes. Most of the critical events that our subjects experienced indicated unequal ethnic relationships. For instance:

- S1: My father was Puyuma and was a respectable school principal. My mother was Han Chinese from a wealthy family. My childhood was full of joy and I was not conscious of ethnicity ... In the middle school, I gradually became aware of my lower status by receiving some special treatments for aborigines.
- S2: In my childhood, I felt the discrimination against the aborigines, but my encounter with Catholic missionaries and their charity towards the poor and the weak became a sanctuary protecting my personality from distortion.

Critical reflection

Triggering events usually stimulate the individual's critical reflection. Analysing the subjects' narration, the findings revealed that different aspects of transformative learning occurred in various periods of their lives. In instrumental transformation learning, the subjects' critical reflection is focussed on an individual psychological perspective, while in the communicative transformation learning, the critical reflection is focussed on a socio-cultural perspective. In the emancipatory transformation learning, the critical reflection and historical and cultural contexts, usually manifesting structural defects and power domination.

- S6: In my childhood, my speech development was slow ... this caused more suffering in elementary school when Mandarin was the only language permitted. My teachers and classmates looked down on me ... until I showed some talents in handicrafts and woodwork, by which I could communicate more effectively with others ... later on, I attempted to re-create my tribal memory through my carvings ... (instrumental transformation learning)
- S4: I heard of a German missionary who collected Puyuma oral history from the elders. When he left for his country, he wanted to leave his archives to the tribal members, but none of them valued these cultural documents. ... So he deposited them in a museum in Bonn. ... When I went to Europe, I had a chance to go to Bonn and I reflected on the reality that our people did not respect our own tradition. ... After a deliberate consideration, I undertook to recover the archives, and started to transcribe these materials to revive our diminishing culture. ... (communicative transformation learning)
- S2: From my own experience, I saw my tribe's on-going diminution. ... Many anthropologists and sociologists attempted to explain this phenomenon of extinction as an effect of modernity from diverse perspectives. ... I and many other tribesmen have not accepted this deterministic fate ... We started to have self-consciousness and endeavor to challenge the existing political, economic, social and educational systems, in order to procure for our people the possibilities for future development. ... (emancipatory transformation learning)

Both instrumental and communicative transformation learning are manifested in all the subjects' experiences. However, emancipatory transformation learning only occurs in the life-history of two respondents (see Table 2).

Transformative learning as praxis

Transformative learning is not only a personal cognitive activity; it has also to be validated by the praxis. Praxis is a fundamental concept in Paulo Freire's work and is fundamental to the emancipatory cognitive interest. According to Freire (1972), "The act of knowing involves dialectical movement which goes from action to reflection and from reflection upon action to a new action". Praxis takes place in a real, not an imaginary or hypothetical world. Praxis also means acting with, not upon, others (Grundy 1991). The research findings indicate that the subjects, through the validation of their praxis, strive for transcending the limitation of their ethnic status and background and attempt to adopt various strategic accommodation (see Table 2).

Table 2: Aspects of transformative learning and praxis of the subjects

Subjects	Aspects of transformative learning	Praxis
S1	instrumental, communicative, emancipatory	 actively involved in governmental affairs raised indigenous issues in public
S2	instrumental, communicative, emancipatory	 revival of tribal rituals advocated "indigenous discourses and intersubjective dialogue" by setting up the Journal of Taiwan Indigenous Voice Bimonthly and the innovation of indigenous literature actively involved in governmental affairs introduced indigenous legislative and administrative systems in the national political structure endeavored to introduce indigenous educational reform and language revival
S ₃	instrumental, communicative	 revival of tribal rituals endeavored to revive native language and culture
S4	instrumental, communicative	 revival of tribal rituals endeavored to revive native language and culture inculturated tribal heritage with Catholic beliefs and practices
S5	instrumental, communicative	 revival of tribal rituals endeavored to revive native language and culture
S6	instrumental, communicative, emancipatory	- revival of tribal rituals - promoted and innovated native arts

C. Analyses of the subjects' communal concerns

In the analyses of the communal concerns at critical moments of the subjects' life histories, certain themes such as ethnic relationship, ethnic identity, language, culture, and education were mentioned by all of the subjects. Other concerns including religion, politics, economy, legislative and administrative systems were also mentioned by some.

In the following section, this research discusses the indigenous people's perspective on their historical transition and future development based on their communal concerns and their praxis.

Ethnic relationship and ethnic identity

Ethnic group is defined as a group that shares a common ancestry, culture, history, tradition and sense of peoplehood. Ethnicity is rooted in culture based on shared meanings. As a social identity, ethnicity is both collective and individual. On the one hand, it is externalised for sustaining communal boundary and solidarity, and on the other, it is internalised as an integral part of the individually embodied point of view of selfhood. Ideally, either individual or collective boundary is permeable, and ethnicity as transactional process is rooted in reciprocation, exchange and relatively equitable negotiation of social relationships. However, ethnicity is, to some extent, manipulable by external categorisation and ranking, and it is institutionally produced and reproduced in the course of transactions of different ethnic groups. Power differentials and authority are important here. Power implies competitive access to and control over resources, while authority is only effective when it is legitimate (Jenkins 1997).

From the subjects' narration and historical documents, summarised below are their communal concerns on ethnic relationship and ethnicity. Archaeological studies show that Taiwan has been inhabited for around 15,000 years. The precise connection between these earliest people and the present aborigines is unclear, but unearthed relics support the supposition that the ancestors of the aborigines were already living on Taiwan around 6,000 years ago.

The aborigines belong to the Austronesian racial group, and prior to 1620, were the main residents of Taiwan. The arrival of the Dutch and Spaniards brought the aborigines into contact with other people, but foreign influences were relatively minor and they still occupied a dominant position on the island. The establishment of the Ch'ing Dynasty in China led to greater numbers of Chinese immigrants to Taiwan. The island became an official province of China in 1887, and the assimilation of the indigenous people by a thorough alteration of their customs was one of the main policies. The aborigines gradually lost their prominent position through Chinese institutional involvement.

In 1895 Taiwan was ceded to Japan. Under Japanese rule, the tribes were differentiated, thus giving the aborigines a pan-tribal consciousness. There came simultaneously the realisation that aborigines were a people living in a society conquered, controlled and colonised where they occupied the most disadvantaged position.

When China regained sovereignty over Taiwan in 1945, the aborigines were recognised as 'citizens' according to the 'Minority Peoples' Article' of the Constitution. However, the widely implemented policies reflected the idea that aborigines were a backward people to be exterminated by assimilating them into mainstream society. Institutional discrimination against aborigines hastened the destruction of their traditional societies and deepened cultural stigmatisation. However, the emergence of the social movement of 'localisation' and political reform in the1970s and 1980s provided certain possibility for indigenous revival claims. The 'Association of Taiwan Indigenous Rights Promotion' founded in 1984 revealed a new milestone of reconstruction of ethnic relationships. Indigenous peoples were unified by a pan-tribal consciousness, but it differed from the 'imposed' and 'stigmatised' pan-tribal ethnicity under the Japanese regime. Taiwanese natives endeavoured to challenge the existing power hegemony over them through their collective action of 'Land Claim', 'Name Claim' and other political protests. Gradually, governmental policies of assimilation moved toward multiculturalism, and a new ethnic partnership dawned in the 1990s.

Culture and education

Pierre Bourdieu explains how ethnic groups maintain and change their position in a society by obtaining, exchanging and transforming 'capitals' in various 'fields'. The cultural, economic, symbolic and social capitals shape the segregation of societal structures. In the course of cultural reproduction, institutional education becomes essential to acquisition and ownership of cultural capital.

Prior to the dominance of national education programs, each aboriginal tribe had its own educational system. For example, among the Puyuma, all males at a certain age must enter 'palakuwan', a rite of passage for them to receive on-going training, according to specific age cohorts. Traditional tribal education had four core dimensions through the transmission of (1) tribal values by participation in rituals, (2) tribal history by singing the oral traditional stories, and cultivating the personality of the youth by physical exercises following the rhythm of dance; (3) knowledge and skills for life maintenance such as hunting, fishing, carving, weaving, etc. and (4) harmonious relationship with nature by a living style moved by the rhythm of nature.

With the arrival of the Dutch and Spaniards, a Christian influenced European-based education was implemented, which included religious materials written in the aboriginal languages, but the impact on traditional culture was relatively light. When Taiwan became a province of China, more rigid educational policies were implemented, which banned native clothing, rituals and social norms, and the taking up of Chinese names was enforced. Under the Japanese, reserves were established for the aborigines and education was based on the Japanese system that fostered respect and loyalty to the regime. These various policies led to the destruction of indigenous cultural continuity and development.

From 1945 to 1980, the security of the country and economic development were the most important policy-making considerations. Thus, education of the aborigines was implemented with emphasis on 'national' identification by their assimilation into Chinese culture. Furthermore, the stripping away of legitimacy and effectiveness of native languages and culture led to their greater stigmatisation.

These educational practices continued until the promulgation of the 1988 'Project of Social Development for the Aborigines' which advocated that the policy of assimilation would be changed into multiculturalism. Then in 1998, the 'Aboriginal Educational Act' emphasised the transmission of aboriginal culture, the promotion of their active participation in the modern world, and the creation of a vision for future decision-making based on 'aborigine and nonaborigine partnership'. It seems that henceforth the society has offered a more autonomous space for native people to construct their own educational system for the perpetuity of their own culture.

Development of indigenous peoples in Taiwan

The following perspective on the development of indigenous peoples in Taiwan is summarised from the subjects' narration.

From the Japanese rule through the sovereignty of the Republic of China, the indigenous tradition, social system and culture suffered greatly through institutional discrimination against them. Surrounded by indifference and hostility, tribal members were not

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passive or devoured by fear and desperation. On the contrary, they have chosen to collaborate with researchers (anthropologists, sociologists and historians) in order that their ethnic passage in the world can be documented and transmitted. This is their strategy for 'academic existence'.

From the late 1980s, the emergence of native people's protests against injustice was unified. Gradually, native peoples became conscious that 'anti-power domination' protests and 'central/marginal' dualistic struggles are not enough. Consequently, the indigenous movement advanced toward the reconstruction of 'ethnic boundary and ethnic relationship' based on an inward search and confirmation of 'Who I am', and an outward claim and establishment of 'intersubjective dialogue' and 'responsible partnership'. In other words, the aborigines tried to invent a new form of 'cultural existence' through 'subjective discourses' between native traditions and modernity, and between native culture and other cultures, by means of innovation of native literature, codification of native language, arts and culture heritage.

Furthermore, the political reform of the1990s in Taiwan allowed aborigines to be involved in the 'power' operational mechanism of the State. Thus, native people have the chance to establish their own local and national administrative systems based on the 1994 'Amendments of the Article on Native People'. Moreover, they have claim for the consideration of their ethnic and cultural particularity in the formation and implementation of the policies. It would seem that the revival of the indigenous life-world has become possible and the 'vital existence' of indigenous people can be actualised gradually.

Conclusion

From analyses of the representatives' life-histories, we discover that these tribal members are not passively manipulated by contextual forces and influences. On the contrary, they strive to transcend the limitation of their ethnic status and background to achieve certain outstanding performance affirmed by the mainstream society. Beyond individual development, they still attempt to adopt various strategies such as 'academic existence', 'cultural existence' and 'vital existence' in considering situational restrictions and possibilities for their tribal perpetuity. In fact, their efforts have provoked the consideration of ethnic diversity and cultural pluralism in the pursuit of political democracy and economic development of the Republic of China. However, the historical, cultural and situational contexts are crucial for the emancipatory transformation learning. Indeed, the future development of native peoples, situated on an absolutely disadvantageous position in society, cannot be ameliorated only through individual merit. There is a need to consider structural defects and to create a more humane, just and multicultural society in which native people have greater opportunities for further development through a new partnership of 'dialogue'.

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Since 1995, a year after I finished my doctorate studies in the USA, I participated as an academic expert in educational reform of Taiwan's indigenous peoples. I encountered indigenous peoples' resistance at the beginning. For several years, I exerted effort to understand their concerns and modified my role in relating to them as a collaboratrice instead of an academic expert. And they gradually accepted me as part of their tribes. In my working experience with them, I realised that we mutually learned from each other. I was deeply touched by their effort to transmit their cultural heritage and to struggle for the possibilities of their tribal perpetuity. My intention in writing this paper is to attract more people to be more concerned with indigenous issues. This paper was published publicly with the knowledge and

agreement of tribal members. They encouraged me to voice publicly their concerns.

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Factors influencing the completion of South Australian traineeships: A two-level HLM analysis

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The number of traineeship commencements in the South Australian vocational education and training (VET) system has grown rapidly in recent years. However, a substantial number of trainees do not complete their contract of training. They either withdraw or cancel their contracts. The South Australian Department of Education, Training and Employment (DETE), which is the body responsible for the program, is interested in identifying the reasons why some students complete their contract of training and others do not. The reasons that lead students to withdraw or cancel their contract of training might be related to the individual student and his/her employer or to the provider where he or she studied. Therefore, it is necessary to identify the factors that are related to the individual student and to the provider where the student was enrolled. The procedure used to identify the student and provider level reasons that help or hinder completion involves multilevel analysis which examines both the student and the provider level data sets simultaneously. Hence, in this paper, hierarchical linear modelling (HLM) techniques are employed to examine student and provider level factors that influence the completion of students who commenced their contracts in 1997 in South Australia as trainee commencements by using the HLM 5.0 computer program. The data employed for this study are extracted from the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) for New Apprenticeships and VET Providers data sets. Conclusions are drawn about the student and provider level factors that influence the trainees to complete their contracts of training.

Factors influencing the completion of traineeships

Previous studies on traineeships have indicated that many of the trainees do not complete their programs. Smith (1998, p.20) reported that traineeship completions in Queensland expressed as a percentage of commencements were 53 per cent in 1994–95 and have fallen to 24 per cent in 1997–98. Smith (2000) indicated that almost 60 per cent of trainees in Queensland did not complete their approved program. Furthermore, the author concluded that the completion rates for apprentices and trainees has continued to be low, and has shown no signs of improving (Smith 2000, p.33).

Maslen (2000), in his article 'VTA sounds a warning over the trainees who drop out' in *Campus review* (12–18 April 2000, p.7), reported that in Victoria only one in three to one in four apprentices and trainees completed their training. The remainder, which represent between 67 and 75 per cent of commencements, do not complete their training. This is consistent with the work of Smith (1998, 2000) in Queensland.

Grey, Beswick, O'Brien and Ray (1999) reported that historically 40 per cent of Australian trainees have failed to complete their traineeship. Furthermore, these authors contend that, with the recent expansion in commencements, the non-completion rate has risen to 44 per cent. In addition, Grey and his colleagues reported that, from 1985 to 1993, the average non-completion rate for Australia was 39 per cent and increased to 44 per cent in the period 1995 to 1996.

Grey and his colleagues (1999) reported that the educational level and unemployment duration of the trainee were two of the factors that influence the completion of traineeships in Australia. However, these researchers reported that age and gender do not have significant effects on the differences between completing and non-completing trainees.

Data Collection

The data for this analysis were extracted from the 1997 and 1998 South Australian Apprenticeship and Traineeships Statistics (ATS) data. The clients who are included in the present study are those who commenced their traineeship in 1997 and whose training provider is identified. Therefore the data set employed in the analyses are obtained from 20 providers and 913 trainees in South Australia who satisfied these criteria.

Method

The organisation of teaching and learning in institutions involves students taught within classes, and within institutions that are nested within a region, state and country. Consequently, relevant information for the study of learning outcomes is basically hierarchical. Therefore, in order to understand educational phenomena relevant to learning, it is important to develop and employ hierarchical models that take into account this multi-level organisation of data. Burstein (1980) and Keeves and Lewis (1983) have argued that the key to methodological progress in research into classroom and institution effects on learning outcomes depends on the development of appropriate models and methods for the hierarchical analysis of data.

Computer programs, such as VARCL (Longford 1990), ML3 (Prosser, Rasbash & Goldstein 1991) and HLM5 (Raudenbush, Bryk, Cheong & Congdon 2000), have been developed for the analysis of hierarchical or multilevel data sets. In this paper, the 1997 South Australian traineeship data sets have been analysed with a two level hierarchical model using HLM5. The main purpose of the study is to identify factors at the trainee and provider levels that account for the variation in the completion outcomes of a student's training.

Two level HLM Analysis

Table 1 lists the student level (Level 1 or micro-level) and the provider level (Level 2 or macro-level) variables that are employed in the twolevel HLM analyses. The variable names are given in capital letters, such as SEX.

Student level variables

Twenty-three student level variables are constructed. These 23 variables are categorised into four classes. The first class details student characteristics, including students' AGE, GENDER, client region (C_REGION), Aboriginal and Torres Strait Islander (ATSI) descent, language spoken at home (LANGUAGE), country of birth (COUNTRY), disability (DISABLE), employment type (EMPL_T), number of employees in the workplace (EMPL_S) and workplace region (WKPL_REG). All are dichotomous variables coded as 0 and 1.

The second class provides the client's occupational type according to the Australian Standard Classification of Occupations (ASCO) classification, which includes professional (PROFESS); associate professional (ASS_PROF); intermediate clerical, sales and service,

production or transport workers (SERVICES); and elementary clerical, sales and service, labourers and related workers (LABOURER). The third class is employment type of the client according to the Australian and New Zealand Standard Industry Classification (ANZSIC) – namely, agriculture or mining (AGRI), manufacturing (MANUF), construction, property or electricity, gas and water (CONST), wholesale, retail, finance, transport or communication (RETAIL), government, education or health (GOVERN), and culture, personal or accommodation (CULTURE). All are dichotomous variables coded as 0 and 1. The criterion variable contract status (CONT_ST) is also a dichotomous variable coded as 0=not completed and 1=completed.

The fourth grouping includes variables that show the students' educational background. Two variables, highest school level completed (H_SCH_C) and prior educational achievement (P_EDU_C) are included in this category.

Provider level variables

The provider level variables are categorised in five groups. The first grouping involves characteristics concerned with proportions of students. In this group there are nine variables – namely, mean age of students in a provider, proportion of gender of students in a provider, proportion of clients in a provider who live in a capital city, proportion of clients in a provider whose workplace is in a capital city, average number of client employees in a provider, proportion of non-Aboriginal descent students in a provider, proportion of Englishspeaking background students in a provider, proportion of Australianborn students in a provider, and proportion of non-disabled students in a provider.

The second group is the proportion of clients' type of employment according to the ASCO classification. This includes the proportion of professional (PROFESS²) clients, the proportion of associate professional (ASS_PROF²) clients, the proportion of intermediate clerical, sales and services, production or transport worker (SERVICES²) clients, and the proportion of elementary clerical, sales and services, labourers and related worker (LABOURER²) clients in a provider.

Table 1: List of variables included in the HLM analysis

Levels	Variables	Descriptions
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Student	AGE	Age of client
level	GENDER	Sex of client, o=Male and 1=Female
(Level 1)	C-REGION	Client region, 0=Other and 1=Capital City
	ATSI	Whether or not the client is of Aboriginal
		descent,
		0=Aboriginal Descent, and
		1=Non-Aboriginal Descent
	LANGUAGI	ELanguage spoken in the home, o=Other and 1=English
	COUNTRY	Country of birth, 0=Other and 1=Australia
		Highest school level completed, 1=Completed
		Year 9 or below, 2=Completed Year 10,
		3=Completed Year 11 and 4=Completed Year 12.
	P EDU C	Prior educational achievements, 0=No prior
	100	achievement, 1= One prior achievement,
		2=Two prior achievements, 3=Three prior
		achievements, and 4=Four prior achievements
	DISABLE	Whether or not the client has any kind of
		disability,
		o=Has some kind of disability and
		1=Not disable
Student	AGE	Age of client
Student	EMPL_S	Number of employees in the clients workplace,
	o	1=Unknown, 2=1-4 employees,
		3=5-9 employees, $4=10-19$ employees,
		5=20-49 employees, $6=50-99$ employees,
		7=100-199 employees, 8=200-499 employees,
		/-100 199 cmployees, 0-200 499 cmployees,

Table 1 continued

Levels	Variables	Descriptions
		9=500-999 employees and 10=1000 or more
	EMDI T	employees
	EMPL_T	Employment type, 0=Public and 1=Private
		Workplace region, 0=Other and 1=Capital City
	PROFESS	Professionals, o=Other and 1=Professionals
	ASS_PROF	Associate professionals, o=Other and
	appi//apa	1=Associate professionals
	SERVICES	Intermediate clerical, sales and service,
		production or transport workers, o=Other and
		1= Intermediate clerical, sales and service,
		production or transport workers
	LABOUREF	Elementary clerical, sales and service,
		labourers and related workers, o=Other and
		1= Elementary clerical, sales and service,
		labourers and related workers
	AGRI	anzsic_id Agriculture or mining, o=Other and
		1=Agriculture or mining
	MANUF	anzsic_id Manufacturing, o=Other and
		1= Manufacturing
	CONST	anzsic_id Construction, property or electricity,
		gas and water, 0=Other and 1= Construction,
		property or electricity, gas and water
	RETAIL	anzsic_id Wholesale, retail, finance, transport
		or communication, o=Other and 1= Wholesale,
		retail, finance, transport or communication
Student	AGE	Age of client
Level 1	GOVERN	anzsic_id Government, education, or health,
		0=Other and 1= Government, education,
		or health
	CULTURE	anzsic_id Culture, personal or accommodation,
		0=Other and 1= Culture, personal or
		accommodation

Table 1 continued

Levels	Variables	Descriptions		
	CONT_ST	Contract status- an outcome variable, o=Not		
		completed and 1=Completed		
Provider	AGE ²	Average age of clients		
level	GENDER ²	Proportion of sex of clients		
(Level 2)	C_REGION ²	Average number of trainees in each region		
	ATSI ²	Proportion of clients who are ATSI		
	LANGUA ²	Proportion of clients who speak English in the		
		home		
	COUNTR ²	Proportion of clients born in Australia		
	H_SCH_C ²	Proportion of clients who completed high		
		school		
	P_EDU ²	Proportion of clients with prior educational		
	_	achievements		
	DISABLE ²	Proportion of disabled clients		
	EMPL_T ²	Proportion of clients employed in private		
	_	sector		
	EMPL_S ²	Average number of employees		
	WKPL_REG ² Proportion of clients whose workplace is in			
	_	capital cities		
	PROFESS2	Proportion of clients employed as professional		
	ASS_PROF2Proportion of clients employed as associate			
		professionals		
	SERVICES2 Proportion of clients working as intermediate			
		clerical, sales and service, production or		
		transport workers		
	LABOURER2 Proportion of clients working as elementary			
		clerical, sales and service, labourers and		
		related workers		
Student	AGE	Age of client		
	AGRI ²	Proportion of clients working in agriculture or mining		
	MANUF ²	Proportion of clients working in manufacturin		

Table 1 continued

Levels	Variables	Descriptions
	CONST ²	Proportion of clients working in construction, property or electricity, gas and water
	RETAIL ²	Proportion of clients working in wholesale, retail, finance, transport or communication
	GOVERN ²	Proportion of clients working in government, education, or health
	CULTURE ²	Proportion of clients working in culture, personal or accommodation
	PROVIDER	Provider type, o=Public provider and 1=Private provider

The third group involves the proportion of clients' type of employment according to the ANZSIC classification- namely, the proportions of clients in a provider employed in agriculture or mining (AGRI²), manufacturing (MANUF²), construction, property or electricity, gas and water (CONST²), wholesale, retail, finance, transport or communication (RETAIL²), government, education or health (GOVERN²), and culture, personal or accommodation (CULTURE²).

The fourth group includes variables that show the proportion of clients with a specific educational background in a provider. Two variables – proportion of clients in a provider who completed the highest school level (H_SCH_C²) and the proportion of clients in a provider who have completed some level of educational achievement (P_EDU_C²) – are included in this category. All the provider level variables mentioned above are formed by aggregating the student level variables to the provider level.

The fifth group involves the proportion of students in a provider who are employed in the private sector (EMPL_T²). This variable is aggregated from the corresponding student level variable. The last variable is PROVIDER, which is a dichotomous variable that is coded, o=public providers and 1=private providers. Figure 1 shows the general two-level hierarchical structure of the data for the contract status of the trainees.

At Level 1, AGE, ATSI, H_SCH_C, PROFESS, AGRI, GENDER, C_REGION, LANGUAGE, COUNTRY, P_EDU_C, DISABLE, EMPL_S, EMPL_T, WKPL_REG, ASS_PROF, SERVICES, LABOURER, MANUF, CONST, RETAIL, GOVERN, CULTURE, and CONST_ST were entered into the equation. At Level 2, AGE², H_SCH_C², EMPL_T², ASS_PROF², GENDER², C_REGION², ATSI², LANGUAGE², COUNTRY², P_EDU_C², DISABLE², WKPL_REG², EMPL_S², PROFESS², SERVICES², LABOURER², AGRI², MANUF², CONST², RETAIL², GOVERN², CULTURE², and PROVIDER were included in the model (see Figure 1). The student level variables mentioned above were entered into the Level 1 regression equation of the CONTRACT STATUS two level HLM model (Equation 1).

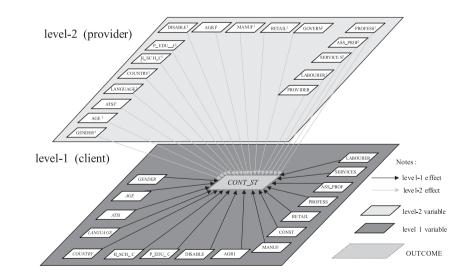


Figure 1: Two level hierarchical model for South Australian traineeships

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Yij=Boj+B1j*(AGE)+B2j*(ATSI)+.....B22j*(CULTURE)r_{ij} (Equation 1)

where:

- Yij is the contract status of student i in provider j.
- Boj is the intercept for provider j.

B1j is the regression slope associated with AGE.

B2j is the regression slope associated with ATSI.

B22j is the regression slope associated with CULTURE.

rij is a random error.

Equation 2 using the corresponding HLM level 2 variables mentioned above is:

Boj=Goo+Go1*(AGE²)+Go2*(H_SCH_C²)+.... Go23*(PROVIDER)+uoj (Equation 2)

Where:

- **Boj** is the intercept for provider j.
- **Goo** is the expected intercept for a provider with values of zero on the predictors **AGE**², **H_SCH_C**², **PROVIDER**
- G01, G02 ... G023 are regression coefficients associated with AGE², H_SCH_C², PROVIDER. These variables are operating at the provider level.

uoj is the unique random effect associated with provider j.

Results

After the initial model was specified, an HLM/2L analysis was employed using the input file with the corresponding equations and the sufficient statistics matrix that had been generated for the South Australian Traineeship data set. The results were examined and coefficients which were not significant, that is, the coefficients whose associated t-ratios were too low and p-values too high, were deleted from the model. The input file was changed accordingly and the data analysis was continued repeatedly step by step until a final model with only significant factor was found. In general, variables were introduced into the model using a step-up procedure in which significant variables were added, rather than a step-down procedure in which non-significant variables were deleted.

Main effects at Level 1 and Level 2

Table 2 and Figure 2 present the results for the final model and show that five student level (Level 1) variables namely AGE, ATSI, H_SCH_C, PROFESS and AGRI had an influence on completion. The sizes of the metric coefficients of AGE (-0.19), ATSI (1.08), H_SCH_C (0.42) PROFESS (2.64) and AGRI (-1.29) indicate the relative magnitudes of effects. Furthermore, four provider level (Level 2) variables namely AGE² (-1.28) H_SCH_C² (-2.05), EMPL_T² (1.81) and ASS_PROF² (3.00) had an influence the completion rate of South Australian traineeships.

The student level factors that are significant in their effects on the completion of training are: age, ATSI, high school completion, professional employment and agriculture or mining employment. Younger trainees are more likely to complete their training than their older colleagues. This finding contradicts the finding of Grey *et al.* (1999) who reported that age does not have any significant effect on trainee completion of a contract of training.

In addition, trainees of non-Aboriginal and Torrens Strait Islander descent are more likely to complete their training than trainees of Aboriginal and Torrens Strait Islander descent. Furthermore, trainees who completed high school are more likely to complete their training than trainees who did not complete high school. This finding is consistent with the findings of Grey and his colleagues (1999), who reported that the education level of the trainee is one of the factors that influence the completion of trainees in Australia. The findings of

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the HLM analysis also show an effect by occupation in that trainees who have professional work are more likely to complete the training than trainees who do not have professional work. Industry also has an effect, with trainees who are involved in employment other than agriculture or mining being more likely to complete their training than those who are involved in agriculture or mining.

At the provider level, factors that have a significant effect on the completion of training in South Australia are mean age, proportions for high school completion, associate professional employment levels and employment type of trainees within the provider. Institutions with a higher proportion of younger students are more likely to have higher completion rates than institutions with a higher proportion of older trainees.

Table 2: Final estimation of fixed effects

Fixed Effect	Coefficient	Standard Error	T-ratio	P-value
For INTRCPT1, BO				
INTRCPT2, GOO	-1.23	0.39	-3.14	0.007
AGE2, GO1	-1.28	0.24	-5.31	0.000
H_SCH_C2, G02	-2.05	0.77	-2.66	0.018
EMPL_T2, G03	1.81	0.84	2.15	0.048
ASS_PROF2, GO4	3.00	0.76	3.95	0.001
For AGE slope, B1				
INTRCPT2, G10	-0.19	0.06	-3.18	0.006
For ATSI slope, B2				
INTRCPT2, G20	1.08	0.33	3.23	0.005
For H_SCH_C slope, B3				
INTRCPT2, G30	0.42	0.13	3.21	0.005
For PROFESS slope, B4		0	0	
1 / 1	0.64	1.0.4	0.10	0.047
INTRCPT2, G40	2.64	1.24	2.12	0.047
For AGRI slope, B5				
INTRCPT2, G50	-1.29	0.51	-2.52	0.021

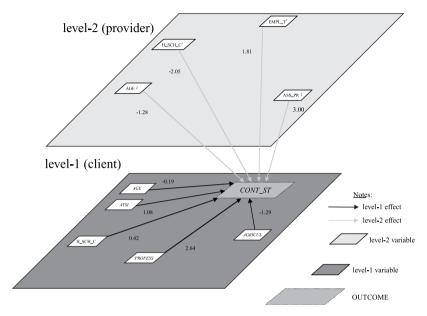


Figure 2: Results of two level hierarchical model for South Australian traineeships

In addition, analysis shows that institutions with the highest completion rates have fewer students who completed high school, after allowance is made for the other variables entered at the macro level. It should be noted that the variable involving proportion of high school completers has an effect that is inconsistent with expectations. However, this effect is recorded after allowance is made for the other variables, such as age, employment type and associate professional.

Furthermore, the findings reveal that institutions with a higher proportion of trainees employed in the private sector have higher completion rates than institutions with a higher proportion of trainees employed in the public sector. The findings also show that institutions with a higher population of associate professional trainees have higher completion rates when compared with institutions with a lower proportion of associate professional students.

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Thus, age of the trainees and high school completion influence the completion of training in South Australia consistently both at the student and provider level. The results show that younger trainees and trainees who completed high school are more likely to complete the training program than older trainees and those trainees who do not complete high school respectively. These two student level factors and the corresponding provider level factor of age and high school completion influence the completion rate of the South Australian trainees. However, there is an apparent inconsistency in the effects of high school completed high school are more likely to complete their course, yet at the provider level, after allowance is made for variables such as age, institutions that get higher completion rates have fewer students who completed high school.

All other student level factors, such as country of birth, language spoken in the home and disability, did not show significant differences between completion and non-completion (see Tables 1 and 2 and Figures 1 and 2).

At the provider level, there are only significant factors that influence the completion of traineeships. The remaining variables including provider type do not have significant effect on traineeship completions. The analysis reveals that the type of training institution (private or public) at which the student is trained does not show significant difference between completion and non-completion of a course.

Conclusion and recommendation

In summary, the student level factors that positively influence the completion rate of South Australian trainees are younger age, non-ATSI, high school completion, professional work and noninvolvement in agriculture or mining work. At the institution level, the factors that influence the completion of trainees in South Australia are mean age, higher proportion of high school completion students, associate professional work, and employment type of private or public within a provider. Furthermore, age and high school completion are also identified as both student and institution (provider) level factors.

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Competency-based training: Adult unemployed students' perspectives of Certificate IV in Small Business Management (NEIS)

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Following research with unemployed adult participants in the New Enterprise Incentive Scheme, quantitative results revealed that of 60 commencing NEIS participants 91.5% graduated, indicating that CBT was capable of delivering meaningful knowledge and practical business skills. Of the 21 participants who completed both pre- and post-NEIS survey questionnaires, 85.7% recorded an increase on the Dimensions of Maturity Scale as a non-competency referenced outcome of CBT methodology. No differential outcomes were found due to gender, education or prior knowledge of CBT. Qualitative results from survey questionnaires and two focus groups found that NEIS participants regarded the CBT process as the strongest learning experience yet encountered which, as a result of learning about themselves, was empowering.

Introduction

Creed, Hicks and Machin (1996) argued that much assistance was offered to unemployed persons by governments, unions, charitable organisations and private agencies in the form of counselling, training, case management and job clubs. Anecdotal claims made by these organisations and agencies suggest that job-search and occupational skill training enable unemployed persons to obtain and hold-down paid employment, and also that the training contributes towards the psychological well-being of participants. While considerable research has reported on national and enterprise outcomes of vocational and educational training (VET), there has been far less research on the outcomes and benefits for individuals. The present research conceptualised the client as the individual, and examined the effectiveness and value of VET interventions from the perspective of the participants involved.

The research had four strands. The first was to explore the extent to which competency-based training (CBT) was capable of delivering meaningful knowledge and practical business skills to unemployed adults participating in the government-funded New Enterprise Incentive Scheme to complete Certificate IV in Small Business Management (NEIS). The second was to explore the possibility that over the six-week duration of the course, as a non-competency referenced outcome of CBT, NEIS participants would make moves towards maturation as described by Knowles (1970). The third was to look for evidence of differential outcomes due to gender, education or prior knowledge of CBT. The last was to seek views on CBT from the perspective of the missing voices in CBT literature - unemployed adult training participants.

Research participants and methodology

Research participants were 60 unemployed adults enrolled in Certificate IV in Small Business Management (NEIS) courses

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conducted by a registered training organisation in the months of May, June and July 1999. They were in three suburban Melbourne locations: St. Albans: 9 females and 14 males; Glenroy: 4 females and 13 males; and East Keilor: 7 females and 13 males.

To explore the extent to which CBT was capable of delivering meaningful knowledge and practical business skills to these students, data were collected on the number of participants commencing each course, and the number of participants assessed as competent at the end of the course and awarded their Certificate.

To explore the possibility that over the six-week duration of the course, individual maturation might occur as a non-competency referenced outcome of CBT, Knowles' (1970) and Ashworth & Saxton's (1990, cited in Deakin University 1994: 260) Dimensions of Maturation Scales were adapted to better suit the business-oriented perspective of this Certificate. All dimensions were worded in first person to enable them to be understood by a broad range of NEIS participants. The adapted Dimensions of Maturation Scale appears below in Figure 1.

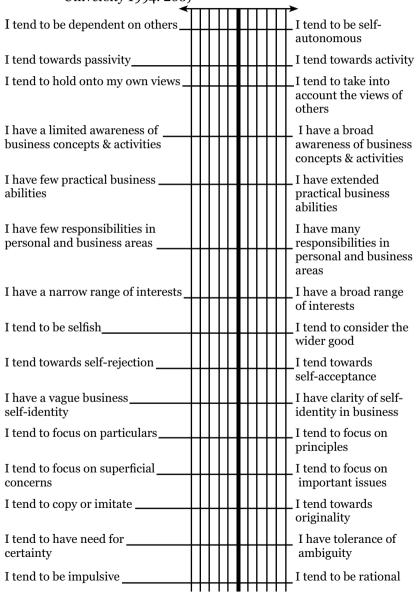
The Dimensions of Maturation Scale was presented to NEIS participants on two occasions: on the first morning of their course with a pre-NEIS questionnaire, and six weeks later with a post-NEIS questionnaire. On each occasion, the Dimensions of Maturation Scale was prefaced with the question: "Indicate with a tick the extent to which you rate yourself **now** on the following personal characteristics". Individual maturation would be indicated by a shift in ratings from the left to the right side of the Scale over the six week period of the course.

The third strand of the research looked for differential participant outcomes due to gender, education or knowledge of CBT. To accomplish this, the questionnaires ascertained educational qualifications, further education and training, and general work and home experience of each NEIS participant. In the pre-NEIS questionnaire, participants were questioned on their previous knowledge of CBT, while in the post-NEIS questionnaire, participants were asked to provide information on their experiences and views of CBT following their six-week exposure to it.

Two lunch-time focus groups were conducted to gather qualitative data from the participants on CBT/NEIS. Informal group discussions during lunch breaks enabled participants to raise their own issues and put forward their own points of view and experiences on engagement with CBT and the New Enterprise Incentive Scheme. The researcher took brief written notes which were later expanded into more detailed notes before being compiled into a qualitative data report.

Figure 1: Dimensions of Maturation Scale (adapted from Knowles 1970, and Ashworth & Saxton 1990, cited in Deakin

University 1994: 260)



Research results

A total of 60 pre- and post-NEIS survey questionnaires were distributed, and 59 completed sets of questionnaires were returned to the researcher. One female declined to participate after reading the questionnaire, and offered no reason. Of the 59 respondents, 55 (16 females, 39 males) were long-term unemployed, while the remaining four unemployed respondents (3 females, 1 male) were recently graduated Doctors of Chinese Medicine.

To explore the extent to which CBT was capable of delivering meaningful knowledge and practical business skills to students, the number of participants commencing each course were counted, and compared with the number of participants assessed as competent at the end of the course. The results showed that the total number of starting NEIS participants was 60 (20 females, 40 males), and the total number of NEIS participants being assessed as competent and being awarded their Certificate was 55 (18 females, 37 males). These results showed a 91.7% success rate for participants, and indicated that CBT was capable of delivering meaningful knowledge and practical business skills to students participating in this Certificate.

To explore the possibility that over the six-week duration of the course, individual maturation might occur as a non-competency referenced outcome of CBT in the delivery of this Certificate, completed sets of pre- and post-NEIS Dimensions of Maturation Scale were analysed. The total number of completed pre- and post-NEIS questionnaires was 41 (14 females, 27 males). Of these 41, only 23 (10 females, 13 males) could be used for research purposes due to inaccurate completion of the questionnaires. Inaccurate completion occurred when a participant omitted to fill-in all of the necessary sections; particularly the maturation scale on page 2 of both the pre-NEIS and post-NEIS questionnaires.

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To yield a score from the 23 sets of completed Dimensions of Maturity Scales, each dimension was numbered from 1 on the left-side of the scale to 10 on the right-side of the scale. This allowed respondents' ratings to be converted into a point score which, when totalled, yielded a minimum total of 15 points and a maximum total of 150 points. Pre-NEIS and post-NEIS scores for each respondent were compared to observe whether a shift in either direction had occurred on the Dimensions of Maturity Scale over the six-week duration of the course.

When all 10 female aggregate point scores were totalled and averaged, the results indicated an average pre-NEIS score of 107.7, and an average post-NEIS score of 133.3. These results indicated an average increase for females on the Dimensions of Maturity Scale of 25.6 points. One female failed to record an aggregate increase, showing a decrease on the Dimensions of Maturity Scale of 5 points.

When all 13 male aggregate point scores were totalled and averaged, the results indicated an average pre-NEIS score of 112.7 points, and an average post-NEIS score of 124.6 points. These results indicated an average increase for males on the Dimensions of Maturity Scale of 11.9 points. Two males failed to record an aggregate increase, and on the Dimensions of Maturity Scale recorded an average decrease of 27.5 points.

Females recorded a larger average increase on the Dimensions of Maturity Scale of 25.6 points compared with males whose average increase was 11.9 points.

The overall results for females and males combined showed that, of the 21 respondents, 18 recorded an increase in maturation as measured on the Dimensions of Maturity Scale, with an average increase of 18.75 points. Three participants recorded a decrease in maturity, averaging 20 points. The questionnaire data which looked for differential participant outcomes due to gender, education or knowledge of CBT revealed no correlation between educational achievement and increases or decreases measured on the Scale, despite the differential outcome that females recorded more than double the extent of increases compared with males.

Questionnaire results indicated that only one female respondent claimed to have any knowledge of CBT before commencing the NEIS program. When the questionnaire asked respondents to record any thoughts on whether or not children should be taught the same as or differently from adults, the general consensus was that adults should be taught differently. One female respondent wrote, "Adults need to be taught differently because they don't need the discipline children do". Another female respondent noted,

I feel that children require a more structured atmosphere, and there [sic] ideas should not be dismissed. Adults (some) should feel free to speak there [sic] minds and not feel intimidated by lecturers/teachers and I feel discipline may not be required as in educating children.

On the question of individual experiences of CBT/NEIS, all respondents were positive:

I feel that the method of CBT is extremely helpful in preparing ourselves to run our own businesses. It encourages you to think on your own and think and see things in ways you normally wouldn't do. I found this method suited me greatly.

Another participant wrote:

I agree that my personally having to do all of the work to complete the plan did help me to use my resourcefulness, creativity and imagination. The CBT method was different to other methods I've encountered in the past, but is a method I preffer [sic].

Yet another respondent:

The assumption of competency on completion of business plan

to gain Cert IV in Small Business Management. I believe that this assumption could be borne out if we all completed course plan but the quality and significance of each individual plan would vary enormously.

Last:

I believe this method of teaching is less pressured. The focus is on learning and completing the business plan ensuring gaining the certificate rather than memorising data for a test which is quickly forgotten.

As a result of the rather intensive nature of the course itself, and the brevity of the 30-minute lunch-break, only two focus groups were conducted: one in St Albans and the other in East Keilor. During the two classroom focus groups, the discussion was started by the researcher with the question: "Well, you're all three or four weeks into competency-based training as a way of learning about business, what do you think about it?". There were never any silences – every participant had something to say. As this researcher has often observed with such individuals, they have a firm opinion on everything, and the opinions are very often as noted by Auty (1999) from angry individuals anxious to tell the society that subsidises them exactly how and why it is doing everything wrong. The general consensus of opinion from both males and females was that the act of compiling the business plan was singularly the most important learning element, especially with them having to learn competencies in order to write something meaningful into their business plan. Also, classmates were brutally honest, in a good-natured way, in making commentary on the progress or lack of progress of others.

As reconstructed from the researcher's scribbled notes, below follow the responses of focus group participants that reveal the feelings and extent of understanding of CBT/NEIS:

I've realised that I'm a good information getter. In fact I think I am competent at it. I've learned that you've just got to know where to look, and to have a definite question to start with, so you don't get lots of unnecessary info. I've found out more info. about my business in three weeks than in the previous three years. I've become a more confident person as a result. I'm even helping others.

One male respondent said:

I always thought that I was very confident in all things; but, when it came to interviewing potential customers about what they wanted from my services, I suddenly realised that the confidence I had displayed all of my life was really bluster. I've come to realize through this course that confidence and competencies develop with knowledge; and, each time I've gained a little knowledge I've also increased in confidence. Even my friends and wife have noticed a difference in me.

The previous male respondent was not the only person who claimed to have learned things about himself. A married female said:

... all of my married life, and I think my husband will go along with this, because he caused the way I think to a large extent. I thought that I was just another housewife raising our two kids and that my husband Andrew was the business-person in the family; he's always the one with the ideas. But, during the course I have found out that while he will be the one doing the actual work of gardening in our business, I will be the one running the business. Both of us, Andrew and myself, have come to recognise that I'm the good organiser of everything. I'm the one who's good on the 'phone, and writing letters and dealing with customers, and with money. He just knows about gardening and stuff; and we would never have found all of this out if we hadn't been forced to do it ourselves through the comper...competency... training method you told us about.

A male response to the above was:

Yeh, when you started us out on that first day, you made this CBT sound good, but on the second day, after you explained the process of setting-up the legal structure and giving a name to our business you told us: now, go and do it. I was shocked. I thought the teacher was supposed to help us. But you told us the process and made us go and do it. I was so afraid that I wouldn't know what to do. [Interjection from another class participant: You didn't know what to do, you wacker: none of us did]. Yes, you're right, and when I asked you what do you think [to the trainer] your reply was always: "Well, it depends. What do you think?" You haven't told us anything for four weeks now, but, I must admit, I'm learning. Perhaps learning better than any other way. But, it's hard, making the decisions. That's one thing I learned about meself: I'm not that good at making decisions.

The type of learning these NEIS participants encountered was sometimes surprising to them. A young Chinese-born female university graduate five weeks into the course said:

before this course I had been with David for three years at Uni; and we always planned to go into business together. But during the first three weeks here we've come to realise that we really aren't as compatible as we thought we were. In fact, we've split as boyfriend and girlfriend, and we're going to start separate businesses. For me, going on with David would have been a huge mistake. Somehow, this competency approach makes you see things clearly. I've matured as an adult in four weeks from a student into a business-person: don't you think?

Generally speaking, through a show of hands, NEIS participants indicated a general dislike for traditional schooling as they had previously experienced it, but a liking for the methods and processes of CBT as they had experienced it with NEIS. The exception to this way of experiencing CBT came from some overseas-born and educated participants. When asked to elucidate, it seemed that they would have preferred the older educational style, with me as teacher telling them what to learn, how to learn it and what to write in their plan. Despite their preferences in this regard, practically all overseas-born NEIS participants completed the course and emerged with an approved business plan, and a Certificate IV in Small Business Management (NEIS). NEIS participants indicated that CBT was by far the strongest learning experience they had yet encountered. For all participants, the other most discussed factor of CBT was how they came to understand so much about themselves and how empowering this was to them.

Conclusions

The results of the research demonstrated that CBT/NEIS was capable of delivering meaningful knowledge and practical business skills to students participating in the Certificate IV in Small Business (NEIS). The results also showed that positive moves towards individual maturation had occurred despite the possibility that some of the participants suffered psycho-social, institutional and situational barriers to learning associated with the effects of long-term unemployment before commencing the NEIS program. Generally speaking, the research found that NEIS participants indicated a liking for CBT as they had experienced it in the NEIS program. For all participants, the most surprising factor of CBT was how they came to understand so much about themselves in using CBT processes to construct their business plan. No differential outcomes, however, were found due to gender, education or prior knowledge of CBT.

The research found support for CBT, and demonstrated that many of the critical and oppositional discourses to CBT are not applicable in the context of Certificate IV in Small Business Management (NEIS). These findings did not support theorists such as Jackson (1994) who reported on scholarship which showed that competency paradigms did not improve learning, nor British theorists who argued that CBT was a 'theoretically and methodologically vacuous strategy' (Hyland 1992: 35). As well, the findings failed to lend credence to the proposition that the design of CBT learning materials and module assessments were such that no question could be asked of a student for which the answer was not provided in the modules; and that no materials were presented as problems to be engaged with or situations to be investigated (Cooper 1992). Further, although Cooper (1992) concluded that CBT did not represent reform for working people since it did not raise the problematic of power relations within society or within the workplace, and Magnussen and Osborne (1990) argued that CBT was a form of bio-power seeking to render individuals powerless in the quest to alter the process of capital accumulation, it is apparent that these authors had not been exposed to CBT as applied in the NEIS program. An examination of CBT/NEIS showed that materials in the course were presented as problems to be engaged with, and that the problematic of power relations lay at the very foundation of the course, since during the CBT/NEIS process participants adopted new roles in the capitalistic economic system – the roles of business owners, potential employers and accumulators of capital.

A problem with the findings, as in all case studies, is the lack of generalisability. While the particular cases in this research might have yielded favorable results about CBT/NEIS, to have confidence in the conclusions the results would need to be pooled and analysed with other studies. For this reason, further research gathering data from students in similar courses needs to be conducted to gain a wider perspective on the results. Lastly, despite the positive findings of the research, the correlation between CBT/NEIS and the delivery of meaningful knowledge and practical business skills, and self-report increases in maturation over the six-week course, causation cannot be established.

Despite the positive findings of the research, much can be done in future research to further establish the credentials of CBT, and to establish theoretical underpinnings capable of explaining the findings. For instance, the NEIS course could be delivered to matched groups of participants, one group using traditional educational methods and the other using CBT to deliver the Certificate IV in Small Business Management. Results could then be compared and explanations advanced for any differential findings. As well, longitudinal studies exploring the longevity of CBT learning, and pooling the results of other similar studies, might make valuable contributions to CBT theory and debate.

In the literature it has been argued that the application of CBT to NEIS reifies the Australian economic context and does not leave room for competing constructions (Toms 1995; Porter, Rivzi, Knight & Lingard 1992; Stevenson 1994). Therefore, it would seem that, as a training practitioner utilising CBT, I am complicit in legitimising the hegemony of the dominant discourse (Toms 1995). But, for NEIS participants living in a capitalistic society, and wanting to start and operate their own business enterprise, this seems to be entirely appropriate.

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Derek J. Kosbab is presently the Training Coordinator for a registered training organisation in Victoria, and remains actively engaged in training unemployed adults to enter or re-enter the workforce. A different version of this paper was used in partial fulfilment of the requirements for the degree of Master of Professional Education and Training; and has been used as a springboard towards a doctorate.

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The pebble in the community pond: IYOP 1999 to IYOV 2001

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This is a record from a personal perspective of the effects of a pebble with six hats skipped into a small community pond to celebrate the 1999 International Year of the Older Person. The ripples created waves which are still lapping projects started then and continuing to expand and also affect new initiatives in the 2001 Year of the Volunteer. It is a brief record of community projects in northern regional Tasmania linking government and non-government organisation volunteers at every level of involvement from project instigation and management, fundraising and sponsorship, to ongoing day-to-day support. A parallel story tracks what happened as the backwash returned, serendipitously and synchronistically touching one of the third age pebble throwers. This record covers several twists of one lifelong learning kaleidoscope as the focus moved from informal research and practical application in the community to formal research into education, ageing and technology issues.

A society for all ages is multi-generational. It is not fragmented, with youths, adults and older persons going their separate ways; rather it is age-inclusive, with different generations recognising – and acting upon their commonality of interests (Annan 1998, quoted in Sidoti 1999).

Background

Data were gathered informally during research for applications for International Year of the Older Person (IYOP) projects to promote healthy ageing by facilitating the uptake of technology by seniors. Current research follows on from the work done during the IYOP year and is intended to be of practical use in the International Year of the Volunteer (IYOV) and future projects involving third age learners and new technology. In this cyclic ongoing research, questions posed are answered or not answered, new questions are formulated and the extent and nature of issues and implications are explored and analysed. Theory put into practice, informing research, generating theory has been a well trodden path, but as the lines of communication become longer and more cluttered in this technological age, Field (2000) suggests that 'as the field expands and as its boundaries become blurred, we may need to look for ways of renewing and strengthening dialogue between research and practice (p.10).

Current research 2000–2001

The first of a three-phase project studying seniors on-line is a collaborative Telstra Research and University of Tasmania pilot studying adult learners 55 years and older using public online access facilities or privately owned computers to access the Internet (Hazzlewood & Kilpatrick 2001). Due to a confidentiality agreement, an abridgement describing the methodology and reporting on the findings from this small sample study conducted during 2000 has been authorised by Telstra Research and has been submitted for

publication as a refereed paper (Kilpatrick & Hazzlewood 2001). The second phase is a comprehensive literature review featuring a core of twenty recent and current research papers. The review seeks answers to questions developed from the pilot study, identifies emergent themes and gaps in the literature inviting further research (Hazzlewood 2001). The third phase, research informed by findings from the pilot project and from the literature review, widens the age group studied to include a decade of baby boomers 45 years and older and narrows the focus to training and support matching the needs of new third age learners accessing information and communication technology via the Internet.

The community groups encircling the community pond pre-1999

SPICE – Senior Persons In Care Entertainment NCWL – National Council of Women of Launceston OPRG – Older Persons Reference Group LOAC – Launceston Online Access Centre

- Music helps to identify a perceived need SPICE (Senior Persons In Care Entertainment) is a mixed group of volunteer musicians pre-dating the Spice Girls by a number of years, who visit nursing homes in Launceston providing entertainment for the residents. Participation in this group until recently enabled firsthand observation of unmet needs of mentally alert but bored and isolated older adults for stimulating activities other than those arranged by nursing home staff. Consultation in 1998 with therapists and nursing home staff and residents identified an interest in exploring new information and communication technology (ICT).
- A general need for ICT information confirmed National Councils of Women is composed of a number of affiliated community organisations with similar aims and objectives, which on their own could achieve little, but together have strength. In

1997, the NCWL (National Council of Women of Launceston) sponsored a seminar open to the public to raise awareness of technology and the way it impacted our lives. The seminar was quickly booked out and highly successful and highlighted a big gap in the provision of a non-threatening, easy approach to learning more about all facets of ICT, including computer familiarisation, desktop publishing, Internet access and e-mail.

- Mental stimulation thought to promote healthy ageing OPRG (Older Persons Reference Group) is a Northern Tasmanian not-for-profit group composed of representatives from a wide range of health and aged care professionals and service providers. It was surmised that the mental stimulation provided by access to ICT would encourage participation in physical activities and this proved to be the case in a most exciting way. Men and women in residential care attended computer classes and aqua fitness activities at the Launceston College where Aged Care VET students acted as tutors and mentors in the 50 Plus Program detailed below.
- Perception, perseverance and pragmatism
 OPRG and NCWL formed an enduring partnership when the
 NCWL advisers of ageing and health who are also members of
 OPRG combined to carry out the shared commitment of the two
 groups to the promotion of healthy positive ageing through a
 number of initiatives. People in this older age group have time
 to spare as well as a keen interest in the ICT opportunities
 available as is shown by the number of mature age people at TAFE,
 School for Seniors and Adult Education computer courses and at
 PublicOnline Access Centres, Libraries and computer user groups.
- Community ICT needs, wants and interests analysis LOAC (Launceston Online Access Centre) was established in late 1998 as part of the Federal Government Networking the Nation Program. Research to support the application and community liaison included a community cross-section needs assessment and

this further highlighted the need for public access to information about training and support for adults. A particular focus was on those over 55 years coping with rapid technological change with little opportunity to access ICT. A review of current literature provided background information for the grant application.

The six thinking hats pebble

The first of the OPRG/NCWL initiatives early in the IYOP was the De Bono Six Thinking Hats workshop funded by a Tasmanian State Community Development Grant and open to men and women with an interest in or curiosity about both parallel or lateral thinking and in the needs of older people. Ninety people attended the workshop which was hoped would have a 'pebble in the pond' effect and it proved to be just that as participants came from a wide interest and occupation cross-section of the community, either individual seniors themselves or those involved in service provision for older people. The effects of the ripples in the community pond far exceeded expectations as a number of cross-sectoral and intergenerational linked partnerships were formed and are on-going.

In the evaluation comparing expectations and actual outcomes, it is reported that networking and partnership outcomes exceeded the applicants' confident expectations of the impact the workshop would have on community leadership and involvement. The wide crosssection of public and private sector representation at the workshop suggests that the concepts will be used in a variety of group and personal situations. Seventy five people completed evaluation forms based on a five-point Likert Scale. There were fifty eight 'excellents', eighteen 'goods' and one reply from a lady who said that, at 86, she felt it was 'good' for some and 'satisfactory' for some. There were no 'poors'. Fifty nine strongly agreed and nineteen agreed with the statement that 'the material was interesting and mentally stimulating'. The statement 'I will try to use the ideas in some way to promote healthy ageing' elicited forty three who strongly agreed,

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twenty seven who agreed and five who were undecided. One in this last category commented, 'only nineteen, but I guess so'. A number of respondents 'would like to learn more' and stated they would be looking at ways to apply the concepts of parallel and lateral thinking to a range of group and individual activities.

Newcomers to the pond in 1999

eLaunceston TRL SeniorLink MTC - Making the Connections

- Telstra Research Laboratories (TRL) community portal eLaunceston is a three-year Telstra Research Laboratories (TRL) research project aimed at bringing together local information and providing communications, community building and electronic business services. Through eLaunceston, TRL wants to better understand the factors that motivate people to use, and continue using, the Internet. The Launceston community wants to increase understanding and use of the Internet for the economic and social benefit of the region.
- SeniorLink seniors helping seniors

No credit is claimed for the establishment of SeniorLink early in the IYOP. This association, officially 'Linking Tasmanian Seniors' and based on SeniorNet, was started with a handful of seniors in southern rural Tasmania by Pastor Ron Clarke who saw the need for a mutual support group for budding Cyber Seniors so called by Scott (1999). It has snowballed and spread to northern and north-western Tasmanian regions, receiving state and national recognition. SeniorLink provides seniors with general and special interest email newsletters, help desk support and regular workshops and has a strong eBuddy mentor focus.

Scott (2001) writes about the 'increased provision (in particular by the Commonwealth) of superseded equipment'. One example

is the expansion of SeniorLink which added another dimension to the seniors helping seniors program in 2000 with Compassionate Computers, a scheme which recycles donated older 486 and lowend Pentium computers and places them with homebound and nursing home residents on an indefinite loan basis. Computers can be programmed to suit the needs of people with age-related and other disabilities. The only provisos are need and the guarantee of an eBuddy to support the recipient(s).

• MTC – Making the Connections

The MTC was a national 1999 IYOP initiative coordinated by the Rural Development Centre (now Institute for Rural Futures) at the University of New England, Armidale. (Foskey 2001). It connected non-metropolitan older people and technology and has expanded in 2001 to become the NEAT (Network for Education Ageing and Technology) peer group listserver.

• NEAT

Burns (2000) states that the purpose of research is not only to increase the researcher's own understanding, but to share that knowledge with others. The value of this sharing is evidenced not only in the literature reviewed but also by the part played by peer group e-mail list services both in Australia and overseas. The NEAT listserver acts as a clearinghouse for information dissemination and in 2001 has over 80 members across Australia and a handful elsewhere in the world. It is cross-sectoral and interdisciplinary (Scott 2001).

Here the parallel stories referred to in the abstract converge again as a contribution to NEAT about the acknowledgement of the part the listservice has played in encouraging and supporting one research journey:

NEAT to me is a clearinghouse of easily accessible, crosssectoral information, advice and assistance with the accent on sharing of experiences, ideas and links to further information. The basic list service format enables multi-source, multidestination exchanges with the focus on the three aspects we are all involved in and may I say passionate about – education, ageing and technology: helping older adults who grew up in a vastly different and less complicated era who want or need to access and continue to use new technology via computers and the Internet. (Hazzlewood, NEAT listserver member, quoted by Foskey 2001)

The 50 Plus Project

With the technological revolution well advanced, and perceiving that many older people were apprehensive about any involvement with ICT, OPRG and NCWL in consultation and with the support of therapy and activity personnel, applied for a grant to purchase a computer to place in a residential care day centre as a pilot to promote older learners' recreational opportunities. This was the 50 Plus Program designed to promote healthy positive ageing through facilitating the uptake of technology for older adults. It was funded by the Sport and Recreation Active Australia Working Party, its three parts being the provision of the first of a number of computers placed in a residential care Day Care Centre community 'hub', the production of a 50 Plus Activities Booklet and the staging of a 50 Plus Expo.

Computers into day care centres

The aim of the 50 Plus computers into the day centres program is to facilitate the uptake of information technology for older persons promoting wellness through providing mentally stimulating recreational activity and providing them with a bright orange iMac. This was funded by the Active Australia Working Party of the Office of Sport and Recreation and was installed as a pilot in a nursing home day centre and is used constantly by people attending the centre for therapy and communication purposes.

The 50 Plus Activities Booklet

The Launceston College VET Aged Care students and their teacher who attended the Six Hats Workshop took over the production of the 50 Plus Activities Booklet to the relief of the pebble throwers. This project, to encourage active rather than passive ageing, was a requirement of the grant and even wearing yellow hats, the initiators could not have forecast the fantastic mushroom growth that would occur from a simple starting point as the project took off on a life of its own with widespread involvement of many diverse groups.

The 50 Plus IYOP Expo

A 50 Plus Expo, coinciding with the official launch of the Activity Booklet and linking all the community groups featured in the booklet, was held at an IYOP Seniors Week Function. It showcased recreational activities for older persons and involved both young and older participants. A University of Tasmania Human Movement student volunteered to organise the Expo and Seniors Card Tasmania provided funding and support.

The 50 Plus evaluation reports that stimulation provided by the computer program is promoting not only increased mental activity but also a renewed zest for life which in turn embraces further activity in physical recreation as well as increasing social interaction. As further reports are received, a marked impact on people relating to the development of self-esteem and self-confidence among those formerly socially isolated is noted.

Circle 2000

Telstra eLaunceston became a sponsor and partner in the CIRCLE 2000 Program (Computers into Residential Care Learning Experience) that was formed at the conclusion of the 50 Plus Program supplying two pre-loved computers for two more nursing homes. 248 June Hazzlewood

CIRCLE is administered by the Diversional Therapy Association and involves VET Aged Care students, SeniorLink eBuddies and computer literate volunteers from the general community.

Open – Older Persons Exchange Network

The latest pebble tossed into the pond by OPRG and NCWL to mark the 2001 IYOV has just reached its destination and eight superseded Power Mac 7200s have been donated by the Attorney-General's Department in Canberra. The donation will be used to improve access to e-commerce by people with a disability and/or older adults in line with the HREOC Report tabled on 8 June 2001. In this age of rapid change, becoming computer and Internet literate is not only necessary but the mental stimulation promoted is seen as a hedge against social isolation. A core management committee is drawn from members of community groups including OPRG and NCWL, Rotary, COTA, Seniors Card and the Launceston City Council.

Summary

This narrative describes some of the activities of a very small selection of players in and around a very small community pond. There are many actual and virtual pebble tossers in this and other ponds, lakes and oceans not mentioned here, unsung and unseen, but all with stories to tell. It is also an acknowledgement of the collaboration and cooperation inherent in community networks. Snapshots from the projects include:

- Seniors from nursing homes attending computer classes at Launceston College
- Aqua fitness classes following from contact with the college
- VET Aged Care students receiving accreditation for related modules
- VET Aged Care students continuing to produce the 50 Plus Booklet independently

- TAFE fashion students considering design of bathers for older women
- Diversional therapists introducing ALA learning circles to nursing homes
- OPRG members presenting learning circles as no-fees, adult education courses
- Seniors moving from public access to private computer and Internet use
- · Volunteers of all ages involved in many areas of new technology

Rather than build a wall to keep out the wind, we must build a windmill and generate the tremendous human power that adult education and life-long learning can bring (Fifth International Conference on Adult Education, Hamburg, in Adult Learning Australia 1997).

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About the author

June Hazzlewood is a lifelong learner interested in education, ageing and technology. She has experienced several changes of direction within the discipline of education from teaching handcrafts to people with disabilities, to K to 10 art and music, to personal development, adult literacy and numeracy training with long-term unemployed adults. She has returned to formal study following retirement.

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Skill learning and general development of expertise: One solution in an inequitable, top-down system?

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Socrates: No tools will make a man a skilled workman ... Glaucon: Yes ...the tools which would teach men their own use would be beyond price.

(Plato, Republic, II,374 A)

In the choice of a general, we should regard his skill rather than his virtue; for few have military skill, but many have virtue. (Aristotle, *Politics*, 1309b3)

It is something of an irony that sporting organisations appear to be much more aware of the challenges involved in effective training for skilled performance than those sectors of the society directly responsible for the education and development of individuals for life and productive work.

(Ian Cornford 1999:285)

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This paper is about fairness and effectiveness in education. It emphasises skill learning and self-direction. It seeks answers in a time of falling equality in Australia. It says learners need to know more about the actual process of learning if they are to obtain the equity and justice they deserve. They can take the first steps in mastery learning, reach high levels of competence, obtain certificates of validity and avoid charges of incompetence if they are given the proper insights into skill learning, and their facilitators can escape charges of poor assessment. A new self-directedness can also provide defences against the growing tendency for top-down decisions, academic elitism, educational financial famines and attempts to reduce learning to technological functionalism.

Do people fail, or does the system fail them? It is unfair to call upon people to acquire new skills without insight into the learning process. Then we set the individual adrift, swept away by the accelerative thrust of technology in the hands of global corporatism demanding more profit, less and cheaper labour. He or she will be compelled to obtain the new skill, or get out. Many choose to 'get out' or settle for goals well beneath their potential. Equity in education is not just about money; it is also about trusting and helping the learner. There are plenty of people who need help, and they can do better.

The HECS barrier is too high for those shut out from higher learning: mature-age people, part-timers, external students, those with parents who have little education, non-native speakers and disadvantaged people or those with disabilities (Powles & Anderson 1996:25).

Unjust features are easily observed in education's haunted landscape: money misdirected or denied; academic gateways blocking talented poor; inadequate training; allegations of incompetence; the widening gulf between haves and have nots; egalitarianists unable to sing their song in a strange land, weeping as they remember a 'fair go' Zion. It may be time for the cavalry to arrive in the form of educational psychology, telling how we process information into easy-to-recall knowledge through repetition, how the memory works, developing a mental model, working in peer groups and cognitive strategies. A learner could receive no better gift than *Magic memory* by Hanne Christensen (2000) or *Use your head* by Tony Buzan (1983) – books that tell people about memory mind maps, retention of knowledge.

We must reduce or eliminate the number of people who regard themselves as incapable of new tasks. They can learn that Repetition is the mother of skills. Cognitive strategies can be a revelation.

A just educational system improves communication by recognising people's preferred styles of learning. It gives adequate tutorial support. Learners can acquire for themselves the specialised skills society needs to run smoothly. Yet many people accept premature employment redundancy because they are afraid of stretching to find new competence, to confront and deal with change.

We also have to consider standards. The weakening of the links between competency standards, curriculum and assessment has been made clear (Golding, Volkoff & Ferrier 1997:3). 'User choice' has transformed equity. Simplistic, quantitative methods in isolation do not work. I say it is reasonable that if there are increased choices they should include choosing the way learning is undertaken. 'Access' and 'equity' and 'participation' are not the same thing.

Equity means human potential being developed to provide economic justice. It also means telling people how their minds work when they sweat for new abilities. Retraining is part of today's employment picture. Conflict between current learning and prior learning is a problem. A group disadvantaged on one dimension may or may not be so on another dimension (Golding *et al.* 1997:7). I would say that those who have been doing one task automatically for years and are required to retrain for a similar but more evolved task may be

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disadvantaged in comparison with others to whom it is all new. This is one of the reasons I have emphasised skill learning. 'Negative transfer' is a problem for the facilitator and the learner.

Skill learning is very important for women. A successful typist returning to the workforce to learn about spreadsheets on a computer needs to know that her difficulties have nothing to do with declining intelligence but instead with conflict with prior learning. Many women are returning to work, but it is often on a casual basis with limited training (Golding *et al.* 1997:10). Indigenous people can benefit from better knowledge of the importance of images. Rural people and people with disabilities need to know learning techniques to improve their skills.

Not knowing how to process knowledge nor how through repetition to translate it into skill are universal weaknesses. The problem is worse if one is not a native speaker of English. The questions of participation and access are likely to become controversial in the years ahead. Powles and Anderson (1996:96–129) identify the social service versus economic utility dichotomy in TAFE. Employers promote their needsbased claims in education. The pendulum has swung to economic utility since 1990, while 'open access' is often derided. Greater emphasis on skill learning will emancipate the learner and satisfy the needs of business. The upwards drift in academic status of TAFE courses (Powles & Anderson 1996:23) demands better understanding of learning processes.

Considering gender equity and skill learning makes us ponder the unfortunate effects upon female learners who accept the silly idea that 'maths are for boys' and 'the teacher has the answers'. Partnerships such as that between teacher Dorothy Buerk and student Jackie Sablewski (Buerk & Sablewski 1993:151–164) show skill learning using a reflective journal to open new frontiers. The same could be applied to the problem raised by Dr Peter West concerning the sport versus reading conflict in Australian boys (West 1998:25–26). Boys can be exposed, too, to 'human joy, challenge, reflection, puzzlement, intuition, struggle and excitement' (Buerk & Sablewski 1993:151).

We can step outside political or educational tyrannies. Learners can follow the cognitive and autonomous stars of Paul Fitts (1962, 1964, 1968) that help people to become experts through drawing on rich mental models. Skill exchanges – where those wishing to learn a skill can find skill models (experts) – could be set up on the Internet. Peer matching on a computer network would reinforce this.

Shirley Smith in *Schooling: More or less* has cautioned: If there is to be no certification, however, how happily would one go to a dentist, with only his word that he has sat in with a skill model? (Smith 1980:115).

I say learners must acquire skills so that their certificates mean something. Educational inequity is the ugly child of diminishing equality, conceived by the unsound notions of the 'self-made Australian' and an unfair, stratified system critically affected by business elites and stingy governments. Learners shown *how* to learn skills may hoist their own educational sails rather than be blown by the big winds of dominance, or waiting, becalmed, for an egalitarian renaissance. 'Egalitarian' Australia has at times been prepared to exclude women, Aborigines or refugees, people regarded as 'slow', poor learners or 'incompetents'. Our representative democracy, petrified by the prospect of capital flight, denies financial support and proper educational opportunities to single mothers of teenagers although they have endured years of isolation and poor health. There are many other castaways in the third millennium. It is not good to be an outcast. The psychologist Alfred Adler observed in the 1930s:

The departure from the social standard violates an immanent social ideal which every one of us consciously carries in himself (Adler 1930: 21).

The social ideals of Australia were conceived when work was plentiful and education was not important except for teachers or the upper classes. Of our time, Elaine Thompson said in her Barton Lecture: Today Australia is one of the least egalitarian of industrialised nations in the world... ABS figures found in the year 2000 that two out of every five families living in poverty had one or both adults working – a stratum of working poor has now been created. Australia [is] one of the most unequal countries in the Western world (Thompson 2001).

The will of Australians is unweakened. Every night we see thousands of Australians head off to learning in their own time. How ludicrous, they discover, many of their self-limitations were. They can find alternatives to old ideas that reproduce the existing social structure (Edgar 1980:191) and the 'symbolic violence' depicted by Bourdieu and Passeron (1977:5).

Sydney University established 1850, Melbourne 1853, Adelaide 1874 and Tasmania 1890 were modelled on elite British institutions for our bunyip aristocracy. The menace of elitism based upon wealth has never left Australian education. Educational establishments still serve the interests of 'the establishment'. University fees were abolished in 1974, but now it is very much a user-pays situation. There is a very real danger our universities will become gatekeepers to an unjust system.

The nation now has a new class of working poor. It is ludicrous to speak of them being treated fairly on a 'level playing field'. To treat disadvantaged people equally is to do them a tremendous injustice. They are victims and their children will be processed by the education system in ways over which they have little control. The Australian sociologist Don Edgar says:

A sort of violence has been done to them which lays the blame for their lack of competence upon themselves (Edgar 1980:183).

Terms like 'the clever country', 'centres of excellence' or 'high achievers' are master symbols from the vocabulary of masters. It is time the learners asserted themselves. What kind of things would learners be told about in the liberatory idea I have sketched? That practice makes perfect; the law of frequency; repetition; spaced practice to improve memory and skill acquisition; intrinsic motivation; autonomy; self-regulation; self-management; meaningful learning; prior knowledge; real world problems and interaction. They are the watchwords of educational freedom.

At first learners cannot distinguish between mediocre and poor work and they need assistance from a facilitator whose ambition is to make them independent through self-regulatory skills, growing from declarative knowledge, that is factual knowledge or content, through how-to-do-it or procedural knowledge to strategic decision-making knowledge. A learner can acquire the cognitive task analysis ability to identify the thinking skills that need to be taught for a learner to think and solve problems like an expert.

Ian Cornford says that expert-novice comparisons, cognitive task analysis, learning by doing, extensive feedback involving comparison of experts and novices and relating to real work settings can be incorporated into many skill learning programs (Cornford 1999:264–285). The call to learning skills, standards, competency and better assessment is also to compassionate and cooperative teaching and learning, the pathway to freedom, where the poor and disadvantaged learner moves from 'I can't do this' to 'We can do this if we try'.

Myles Horton said in 1990, "People have a potential for growth; it's inside, it's in the seed". We should contest the unjust and meagre distribution of the education dollar, but an equitable education system favours working together to improve skill, something Henry Lawson hoped for:

Then we will all meet amidships on this stout old earthy craft We'll all be brothers fore'n aft!

Yes, an' sisters fore 'n aft!

When the people work together, and there ain't no fore 'n aft. (cited in Conway 1984:1)

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BOOK REVIEW

Adults learning

Jenny Rogers Fourth edition Milton Keynes, England: Open University Press, July 2001 ISBN: 0-335-20677-8, 240 pages Distributed by Allen & Unwin, ppb. A\$45, UK13.99 pounds

The Secrets of Success and the Temptations of Charisma

This vivacious handbook is aimed at the thousands of people who are more skilled in their subject area than in the theory and practice of adult learning. It sets out the basics in a lively, accessible manner.

Jenny Rogers published the first edition of *Adults learning* in 1971. As she points out, there have been many developments in the field over the past thirty years, but the fundamentals remain much the same: "The effective teacher of adults has only one motto: 'Learners first."" True to her motto, Rogers begins with the characteristics of adult learners – often anxious, plagued by memories of school, and defensive when their belief systems are challenged. Learners may be motivated by extrinsic factors such as the need to acquire a new skill for work, or intrinsic ones such as the wish to confirm a sense of identity. A useful table summarises the likes and dislikes of the four main types of learners – activists, reflectors, theorists and pragmatists. Her advice for dealing with diverse groups is to mix the approaches preferred by each learning type – games for the activists, time to absorb ideas for the reflectors, abstract concepts for the theorists and practical applications for the pragmatists. Vary the pace, use adult experience, keep it relevant, reinforce, practise... Any thought that adult teaching just comes naturally is quickly dispelled.

Rogers gained her expertise in adult learning decades ago, when she was allowed to observe many tutors in action on the grounds that she was "just some girl from the BBC". Unobtrusive but attentive, Rogers gradually crystallised her views on successful adult learning experiences. She used her knowledge as a broadcaster, a lecturer, a consultant, and importantly, as an author.

Arguing for positive feedback rather than hurtful personal criticism, Rogers contrasts two tutors, referred to as 'John' and 'Andrew'. On paper John's course was superior. However, his bitter, sarcastic style led to disastrous relationships with his students. Andrew, on the other hand, was a model of humour and encouragement who gave criticism constructively. His students gave him a champagne party when the course ended.

In her chapter on "Understanding your group", Rogers uses Eric Berne's transactional analysis to explain the difficulties one tutor had with her group. In this incident, a tutor apologised to strangers for the raucous social behaviour of the group and – a further insult – reprimanded the group again when they next met. The class did not take this well. There were a few minutes of silence, and then they really laid into me. Told me that I couldn't take responsibility for them, they weren't children, they were offended, how dared I. They reduced me to tears. I carried on, but with the greatest difficulty (p.63).

Rogers explains that the tutor had become a Controlling Parent, hooking into the group's Adapted Child. The group, angrier and angrier, also went into Controlling Parent. The tutor switched to Adapted Child and wept – not a happy moment in adult learning.

A chapter is devoted to group participation, and ways of avoiding hazards such as allowing one or two participants to dominate the group. Rogers is particularly interesting on the dangers of tutors who can't resist showing off. She quotes Richard Hoggart's wonderful warnings about the dangers of charisma:

The urge towards a generalised charismatic relationship, that way of showing off one's personality that ends up in the rhetoric of a lay preacher, is the strongest of all temptations. You have to learn to suspect those evenings when a throb comes into your voice, your eye seems bright and eager, and the students look up at you with a touch of wondering admiration. Two types of teacher – in any kind of education, but adult education is a specially dangerous area in these ways – should be particularly suspected: the charismatic, an imaginative Pied Piper of Hamelin; and the systems builder, an intellectual Pied Piper of Hamelin, who offers a complete guide to experience (p.68).

Rogers covers such topics as mixed ability groups; first sessions that overcome adult anxieties; case studies, role plays and games; and lectures and demonstrations. Rogers gives good advice on how to lead a discussion without corralling participants into accepting the tutor's values, and how to be open to unexpected lines of argument.

The concluding chapters are on tutoring open learners; coaching and mentoring, and evaluation. The section on coaching is particularly

good. Rogers believes that, despite all temptations, the coach must resist the temptation to give advice. If the aim is to develop people's resilience and resourcefulness, it is counterproductive to tell them what to do.

A particular trap is what Rogers calls "advice-in-disguise"; giveaway phrases include "If I were you I'd …", "When this happened to me I …" and "Another client of mine tried …".

As Rogers admits in her chapter on evaluation, change in human beings can be very hard to track. She distinguishes four levels of evaluation: enjoyment, personal learning, applied learning and long-term impact. The book concludes with a brief but thoughtful bibliography.

Jenny Rogers is an engaging writer who wears her learning lightly. Her book deserves every success.

Penelope Nelson

Penelope Nelson is a Sydney writer. Her publications include Penny dreadful, Prophesying backwards and the discussion paper 'Lifelong learning: Life transitions and the older learner'.

BOOK REVIEW

Power in practice: Adult education and the struggle for knowledge and power in society

Ronald M. Cervero, Arthur L. Wilson & Associates San Francisco: Jossey-Bass, 2001 303 pages, \$35.00 (hardcover)

Power in practice addresses the concept of power in adult education, providing a comprehensive view of how power is practised in different contexts. This book has two purposes: first, to help adult educators understand how power relationships influence the development of adult education programs, practices and policies, and second, to inform educators about various ways of dealing with power relations. The authors of the book strive to answer the following question: "[W]ho benefits from and who should benefit from the programs, practices, and policies of adult education?"(p.*xv*).

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This question invites us not only to foster a critical analysis in our practices as adult educators, but also to understand the struggle of knowledge that has manifested in the field of adult education. All of the authors agree that adult education is a site of struggle for knowledge and power. Therefore, each author provides examples of such struggle from his or her work experiences, in contexts ranging from the classroom to institutional programming to global policy formation. This approach enables the authors to establish links between their political and ethical theories and their adult education practices. The authors describe this book as an attempt to fill in the gap regarding power and practice in the adult education literature.

The book begins with Chapter 1, 'At the heart of practice', in which Cervero and Wilson introduce the concept of struggle for knowledge and power in society. They discuss three approaches to understanding the power and practice connections that have appeared in adult education literature (political is personal, political is practical, and political is structural).

The remainder of the book includes three parts. Part one has four chapters (chapters 2, 3, 4 and 5) that focus on the struggle for knowledge and power in workplace settings. In chapter 2, Mojab argues, "this economy continues to skill and deskill the workforce, and shows a strong tendency toward polarising workers into highly skilled and non-skilled segments"(p.27). She supports her argument with findings from her interviews with immigrant women. In chapter 3, Schied, Carter and Howell explain their view of power as a silent form of control, using a training program as an example. Butler discusses the concept of discourse and discursive practices of workplace learning in chapter 4. In chapter 5, Rubenson explores the role of the state in shaping public policy decisions about work and learning.

Part two contains four chapters (chapters 6, 7, 8 and 9) that focus on the struggle for knowledge and power in institutions of higher education. Hall discusses globalisation and global adult education in chapter 6. In chapter 7, Johnson-Bailey investigates the power of race

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and gender and the struggle of black women in higher education. In chapter 8, Tisdell explores the power of position in teaching for social change. Hart describes the voices of some marginalised groups in the classroom setting in chapter 9.

Part three includes five chapters (chapters 10, 11, 12, 13 and 14) that focus on the struggle for knowledge and power created by the technology used in the practice of adult education. In chapter 10, Miller discusses the use of new information and communication technologies in adult education. Brookfield takes this discussion deeper in chapter 11 by illustrating how different social actors can be introduced into the classroom through the use of discussion groups. In chapter 12, Wilson shows how place shapes power in continuing education. In chapter 13, Cervero and Sessions offer a way for developing a just HIV prevention program. Finally, Wilson and Cervero conclude their book by describing "a new foundation for adult education" (p.267) in chapter 14.

This book is useful for adult educators in different settings and countries because it offers a universal view of the concept of power in adult education. It can be used as a college textbook, a reference for graduate students in adult education, and a guide for social organisation leaders and program developers. *Power in practice* offers a different approach to program planning practices by considering the adult learners' social context and its role in shaping these practices. Also, it captures how adult educators' micropractices can introduce power and struggle for learners, as they get involved in a program's activities. A major limitation is that there is no suggested instrument, inventory or method to help practitioners clearly identify how much power is bad and how much is good. The case studies presented in this volume are all based on the authors' personal observations or individual experiences that may vary from situation to another.

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BOOK REVIEW

Academic success and social power: Examinations and inequality

Richard Teese Melbourne, Melbourne University Press, 2000

This study provides abundant evidence of a situation that must surely be understood by every thinking teacher anywhere in Australia: that where a student comes from and where they go to school will impact upon how successfully that student will access opportunities beyond school and in later life.

While specific to Victoria, Teese's study applies to other states and educational institutions across Australia and, given current federal and state government policies that favour increased funding for private education institutions, this is a timely book.

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Teese lays bare the structural processes of curriculum content through an analysis of the Victorian examinations system and the results it engenders – specifically, in English, chemistry and mathematics. The text is replete with figures and graphs that weigh heavily as indicators of the differences in student academic achievement between private and public sectors.

Teese states that 'over time, the academic curriculum comes to be moulded by the characteristics of its dominant users' (p.87), and this exploration of the socio-economic geography of the Victorian examination system soundly demonstrates the perpetuation of dominance by the academically successful – who happen also to be the economically powerful. Nor does the author hide his concern that the university points process for entrance and admissions is a very definite factor in the entrenched structure of exclusivity perpetuating the domination of elite private secondary schooling.

The major part of this book is taken up with historical examination of the structural processes attached to curriculum and public university entrance examinations from 1940 to the late 1990s. As such, it will prove an invaluable text for both teachers and students within most fields, but especially educational history, sociology and political studies.

At the same time, however, there is a sense that a knowledge of the theoretical analyses of writers such as Pierre Bourdieu would furnish readers with a better understanding of the emphasis that Teese is making in regard to cultural capital and its explicit and implicit benefits for students.

Without that working knowledge, the reader needs some wider contextual explanation of differing groups of students and their backgrounds. As well, some commentary on changes in social context that have occurred between the 1940s and 1990s would give useful reference points to underscore the analysis and critique of organisational trends in secondary curriculum and university entrance requirements.

Overall, this book is not the optimist's ideal, for the outlook is necessarily pessimistic. In his final chapters, however, Teese does indicate that educational opportunity has widened across socioeconomic groups and that the expansion of non-traditional university programs has created those opportunities. Yet without immense changes to the hierarchical and governmental policy perspective, structural inequality will remain.

Hence, as the author succinctly states, 'economic and cultural advantages are converted into academic power and thence again to economic position and educated life-style, from which again the cycle is renewed' (p.212).

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BOOK REVIEW

Social policy, public policy: From problem to practice

Meredith Edwards with Cosmo Howard & Robin Miller Sydney: Allen & Unwin, 2001 ISBN: 1-86448-948-0, A\$35.00

Professor Meredith Edwards has been both a high level academic and a high ranking public servant in Canberra. Her years spent as Deputy Secretary, Department of Prime Minister and Cabinet and in other departments of the Commonwealth, place her well to provide this lucid and informative commentary on the making of social and public policy at the federal government level. Her co-authors, Cosmo Howard and Robin Miller, have also been deeply involved in the public service processes via academic research and/or the experiences of serving in government departments in Canberra. The authors aim to provide information and understanding to a wide readership. At one level the book will, as the authors state, assist up and coming policy advisers to further increase their potential contribution to the processes of policy making. At another level, this book is aimed at students within higher education who are interested in, and concerned about, social and public policy. The authors suggest this book is used as a text, one that bridges theory and practice through its illustrative and descriptive material. Certainly, the manner in which the material has been divided into accessibly separated case studies, but with a linking framework describing the policy development stages, makes great sense. In a study environment, many students find reading a textbook from start to finish a somewhat problematic task. The format here also allows for the authors to include a dose of contemporary private and public commentary, adding greatly to the personalised impact of each case study.

This is a book that makes fascinating and eye-opening reading for anyone who wants to take more than just a passing glance at the machinations of high level government decision making – especially given that the decision-making encountered in here often forms part and parcel of our everyday lives. The authors describe how four very specific pieces of Commonwealth policy have come into being. The reader is taken through the intricate developmental and practical stages of Austudy, the Child Support Scheme, the Higher Education Contributions Scheme (HECS) and finally, Working Nation. In this book we read how ministerial enthusiasm, public opinion, academic research, political ideology, bureaucratic practice and the pragmatisms and expediencies of economics, all have their part to play in turning ideas into far-reaching policies.

I find it interesting that all the case studies in this volume are of initiatives originally taken up by a Labor government. However, students of politics, history or other areas of contemporary social enquiry may well find this factor an aggravation, as they will have to furnish their own yardstick with which to measure the comparative performances of differing government ideologies. Perhaps that was the original intention – it certainly does not detract from the value of the information provided.

The quality of the writing is especially fine, providing accessible material throughout the case studies and the accompanying observations. Each case study not only presents a clearly signposted description of the structural processes involved in policy making, but at the same time brings the players within that process to life. Usually nameless bureaucrats, as well as the odd carefully PR-groomed politician, are given depth and a real, almost sympathetic, persona within these pages. The book is also worth reading to get a deeper understanding of the sometimes fraught relationships that seem to exist between various departments and their personnel, and how these bureaucracies have important impact on policy and the possibilities for its implementation.

This is a text I would unquestionably recommend to students and to anyone who wants to know more than what the media tells us about decision-making within government, whether Federal or state.

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BOOK REVIEW

The dying soul: Spiritual care at the end of life

Mark Cobb Milton Keynes, England: Open University Press, 2001 ISBN: 0-335-20053-2, 151 pages Rrp. A\$52.95 (pbk) UK 16.99 pounds (pbk), UK 50.00 pounds (hbk)

Mark Cobb is an Anglican priest, educated at Lancaster and Keele Universities and at Rippon Theological College. He has experience in both parish ministry and healthcare chaplaincy, in particular in palliative care. An honorary lecturer in the Faculty of Medicine at the University of Sheffield, Cobb teaches on the spiritual dimension of care and is the co-founder of 'Body and Soul', the national conference on spiritual care. A research associate of the Lincoln Theological Institute and Senior Chaplain of the Central Sheffield University Hospitals NHS Trust, he is the co-editor and a contributing author of

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The spiritual challenge of health care (Churchill Livingstone, 1998). Cobb's present work, The dying soul, is one book in the series 'Facing death', edited by David Clark, professor of medical sociology at the University of Sheffield.

The dying soul is not easy either to read or to review. There is a wealth of information on many issues, such as the problems of professionalism, ethics, training etc. The power of the author's articulation makes it difficult at times to critique what has been said. Although he tries to articulate all the complexity of this dimension, he appears to keep it slanted towards a defense of his own clerical orientation and he does this by concentrating on authority and accountability, which of course are very important.

This book tackles the question of spiritual care in palliative care, first, with regard to the understanding of both spirituality and spiritual care and, second, with regard to issues of practice within palliative care. Chapter 7, 'Developing spiritual care', and the latter half of Chapter 6, 'A professional approach to spiritual care', in my opinion stand out from all the rest. In particular they offer a broad and practical possibility of a way to develop the 'art of spiritual care' within the palliative care setting. The various degrees of care are well voiced. The differentiation between routine care, understood as the provision of a conducive environment as the domain of all in palliative care, and the more specialist levels of care which relate to problems or special needs within the domain, should have been articulated much earlier in the book. The preceding chapters prove much more problematic.

Cobb begins his book with a general discussion on the past and present understandings of spirituality followed in Chapter 2 by a description of the 'Expressions of the spiritual'. However, the only expression which is discussed at any length is that of organised religion. There is no discussion of the aesthetic or ecological or psychological dimensions as expressions of the spiritual. In Chapter 3, Cobb returns to a discussion of concepts of dying and death, anxiety about death, facing death and the use of rituals in coping with dying and for the bereaved in the aftermath of the death. Again there is an implicit apologetic for religion threaded all through this chapter despite this sentence: "Whether through religion, philosophy or the arts, people have insisted that death matters and that it has significance beyond the inevitable ending it imposes" (p.64).

Cobb entitles the fourth chapter, 'Who cares for the spirit?', and this is in fact the core issue of his work. For Cobb this is an issue of professionalism and particularly of accreditation. Palliative care belongs to the institution of medicine, and is organised in accordance with how medicine is structured and regulated in any particular context – cultural, geographical, economic, historical. Within that context, the discipline will develop its own specialisations, expertise and responsibilities. That development will not only benefit the discipline's professionals, but is also seen as necessary for the establishment of confidence in the patient and family population using palliative care services.

It is this understanding of how to organise care that stands in opposition to the growing conviction among many palliative care workers that care of the spirit cannot and should not be sectioned off. For Cobb, this cannot be so. Spiritual care is profession rather than person specific and '...it is the chaplain who has the specific professional duty of the spiritual care of patients, carers and staff " (p.70). His argument here clearly espouses not only a scientific/ medical approach but also an institutionally and bureaucratically encapsulated approach to the organisation of care – namely, one in which priority is given to definition, separation and collective parameters of competence, authority and therefore rights and expertise.

Boundaries of professional responsibility are often regarded as blurred within palliative care (as between doctor and nurse, nurse and social worker, for example). In the provision of care for the spirit,

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however, this dissection of care through a rigid professional defining of responsibility becomes manifestly problematic. This is a delicate issue presently in palliative care where the personal is seen to be as important as the professional. While fully acknowledging the need for professionalism, palliative care also tries to articulate within its organisation the deeply personal and mutual nature of caring. This is a crucial question for both teaching and practice in palliative care.

I, for one, am very glad I was asked to read this book, and I know I will return to it again and again. Not, however, for the answers Cobb offers, because his answers of the chaplain have been given without any real critiquing of the training and practice of that position. There is no mention of the place non-verbal ways of caring for the spirit is encouraged in such training or of the demands for flexibility this care puts on chaplains whose whole lives are encompassed by a particular tradition. But I will return and dialogue with it because of the wealth of questions and issues that he offers and with which we must all dialogue, chaplains included.

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Margaret Byrne is the author and developer of the elective topic, 'Spiritual and cultural aspects of palliative care' in the Masters Degree in Palliative Care at Flinders University. The development of such a curriculum is also the topic of her doctoral research.

BOOK REVIEW

Djama and VET: Exploring partnerships and practices in the delivery of vocational education and training in rural and remote Aboriginal communities

Research report, Volumes 1 and 2 Faculty of Education (Northern Territory University), Batchelor College & Training Network Northern Territory Darwin: NTU Press, 1998 Volume 1, 111 pages; Volume 2, 219 pages ISBN: 1-876248-14-9, no price available

Djama and VET is an exploration of some of the realities of vocational education and training (VET) delivery in the bush. The report covers the findings of a 1995–96 research project, funded by the Australian National Training Authority's Research Advisory Committee and staffed by a steering committee and researchers from, among others, the Northern Territory University, Batchelor College, 278 Julian Moore

Training Network NT, NT Department of Education and Territory Health Services.

The report is presented in two volumes. The first part comprises an introduction, a literature review, and an exposition of the principles of best practice of VET delivery to remote Aboriginal communities. The second volume contains case studies that illustrate in specific terms the aims, methodology, frustrations and achievements of six VET projects in Aboriginal rural and remote communities.

Essentially, *Djama and VET* looks at 'what happens when people... move beyond the rhetoric of public policy to the reality of trying to make training programs work in these circumstances [in remote Aboriginal communities]' (Volume 1, p.3). It is the investigation of this gap, or in some cases this schism, between the rhetoric and the reality that makes this report a refreshingly practical addition to a field that is often overwhelmed by the glossy spin of the inexorable VET machine.

The whole concept of the 'djama' in the title illustrates well the variation between the Western notion of 'work' as a necessary but separate part of life, and the Aboriginal view of 'work' or 'djama' as being embedded within community business and inextricable from all other cultural artefacts and constructs.

In Volume 1, the report looks briefly at the labyrinthine history of education and training for Aboriginal people in the Northern Territory. Through a maze of Commonwealth advisors, training branches of a small forest of bureaucratic education trees and the advent of TAFE in the Territory, the reader is led to the inevitable conclusion of the Dawkins' overhaul of tertiary education and its effects. The re-invention of a totally centralist view of training meant, for Aboriginal people in the Territory, that non-formal training was no longer acceptable to the official sector. VET and similar courses had to be formally delivered through a bureaucratically accredited provider, and trainers had to stick to the letter of the modules, unsuitable though they were for clients in remote areas. Cultural considerations were forced into the back seat as the whole system was driven by 'costing, reporting and administrative procedures based on classroom teaching in a Western context' (Volume 2, p.23). Until the formation of the umbrella organisation Training Network Northern Territory – TNNT – in 1995, the maze was inescapable, even for experienced maze-dwellers.

The literature review section of the report is divided into eight themes that range from 'Policy' to 'Partnerships that work'. All deal in varying degrees of detail with the stark contradictions implicit in the overarching imposition of Western cultural practices on education and training without the acceptance of the presence of fundamentally different cultural constructs under the same arch. It is this difference that the VET bureaucracy seems unable to cope with:

... by integrating a training program into the 'rhythms of the land', the program may be a success for the community but could well be deemed a failure when measured against the criterion of success established by the VET sector authorities – successful performance against competency standards and vocational outcomes (Volume 1, pp.25–26).

As the report notes, the Australian National Training Authority's access and equity strategy, as set out in its *Equity 2001*, may be admirable as a policy but it is arguable as to whether the agenda is achievable in the field. As usual, policy is one thing – implementation is far from certain. The report here notes in passing the similarity between the titles of *Equity 2001* and *Clarke's 2001: A space odyssey*, while hoping that the policy does not become a black hole and vanish behind one of Saturn's moons. Paradoxically, the film's Dave Bowman claimed that the black hole was 'full of stars' – there may be hope for the Indigenous VET sector yet.

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The reader's attention is also drawn to some of the inadequacies associated with the staffing of VET activities that are specifically aimed at Indigenous clients. Perennial issues are dealt with here: staff instability because of their disillusion with a lack of meaningful support, poor staff selection, preparation and inservicing, and a constant unwillingness to provide remote communities with sufficient and appropriate human and physical resources.

The first volume of the report concludes with the project's recommendations covering the needs of six areas that range from the vital integration of workplace learning into community activities to the creation of meaningful partnerships between providers and their Aboriginal clients – 'fair dinkum partnerships, not gammon ones' as an earlier paragraph has it. The recommendations reflect well the essentially practical nature of the research and should elicit a chorus of unqualified approval from anyone who has worked in the field.

Volume 2 of the report consists of six case studies of the courses undertaken through the project. These vary in nature and location, and cover horticulture, health studies, land management, nutrition, stock and station skills and tour guide training. Each case study is prefaced by a brief explanatory report on the context and the aims of the course, and is then given over to what is essentially a narrative approach to 'what we did and how we did it'.

None of the case studies attempts to minimise the frustrations borne out of cultural misunderstandings and bureaucratic inefficiency. At the same time, there is a constant sense that these courses can be and were run effectively, given flexibility on the part of both sides of the learning experience, as well as the crucial understanding by Western providers that, for many Indigenous communities, 'learning is traditionally a collaborative experience' (Volume 2, p.17).

This reader found the case studies particularly rewarding material to access because of the implicit admissions that not everything in Aboriginal communities works the way Western society thinks, quite inappropriately, that it should. The various course coordinators seem to have more or less successfully managed to incorporate this difference in approach to learning in VET scenarios that, perhaps, point the direction for future VET work with Indigenous communities.

This, perhaps, is the value of this project report. It provides interest and even a measure of hope for anyone who has put a foot into the frustrating minefield of VET for Aboriginal clients. It might even get DETYA to cut down the number and complexity of its forms in this field. Maybe not...

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JOURNAL SCAN

Billett, S. 2001, 'Learning throughout working life: Interdependencies at work', *Studies in continuing education*, vol. 23, no. 1, pp. 19–35.

Lifelong learning has become a key strategy in government policies aimed at enhancing the employability of citizens. Additionally, the workplace is increasingly viewed as the principal site where the development for learning takes place and hence, the site which can promote lifelong learning. However, many of the exhortations about the value and importance of the workplace as a learning environment ignore the reality that, for many workers, the workplace is not a neutral environment. It is riddled with inequalities and barriers that prevent many employees from having equal access to the rich learning opportunities that work can provide.

Drawing upon activity theory, Billett argues in this paper that learning throughout working life is inextricably linked to the work practices with which a person engages. These work practices, in turn, shape the thinking and acting of individuals. The quality of learning experiences available within a workplace are, therefore, shaped by the kinds of activities that they can undertake in their work as well as the types of guidance available. Access to learning through working life is mediated by the social practices embedded in workplaces and the ways in which an individual might choose to engage in these practices.

The degree to which individuals are able to maintain their employability through participating in learning in the workplace is, however, quite varied and shaped by a range of factors including events such as transfers or retrenchments, and decisions relating to career paths or the necessities of family life. All these factors potentially can impact on the ability of workers to gain particular types of work (part-time, full-time, contract, casual) and within these jobs, access to the sorts of work and working conditions that will support the learning experiences required to maintain vocational knowledge and employability more generally.

Billett concludes by arguing that because the workplace is a contested and socially constructed environment, it is not reasonable or realistic to assume that workplaces will meet the lifelong learning needs of individuals. Nor is it fair to assume that individuals carry all the responsibility for ensuring that they are able to learn through work when many of the factors that control access to the types of activities and guidance they require to maintain employability lie well beyond their control and rest with employers who have their own interests to promote and protect.

Findsen, B. 2001, 'A road travelled too far?: a case study of the restructuring of university adult and continuing education, *Studies in continuing education*, vol. 23, no. 1, pp. 71–93.

In this paper the author presents a case study of the restructuring of a major adult education provider located within a large New Zealand university. In particular, the author examines the outcomes of shifting

from a strong centralised provider to one based on a devolved model of provision within various university departments.

The case study is set within the broader societal context and, in particular, the massive changes to the public sector that have occurred in the period from 1984 to the present time. Findsen traces the impact on the operation of the university and the place of adult and continuing education within that institution and how the new regime of open competition has severely jeopardised the historically strong position of the university as a provider of continuing education.

Several waves of restructuring within the Department of Continuing Education are described particularly in relation to the implications for staff and the manner in which critical tasks such as curriculum development have been affected. The author argues that the resulting devolved model for provision has diluted continuing education as a public identity and divorced the study of adult education as an academic discipline from its practice. Curriculum development processes emphasise programs that are popular and profitable, thus reducing the diversity of course offerings. The co-location of continuing education staff within the school of education has required these staff to continually assert the importance and value of their existence and what they do to their school-based colleagues.

This paper highlights an all-too-familiar story of how calls for greater efficiency, market responsiveness and increased intervention by management have re-ordered the ways in which work is undertaken in many education settings. Hesketh, E., Bagnall, G., Buckley, E., Friedman, M., Goodall, E., Harden, R., Laidlaw, J., Leighton-Beck, L., McKinlay, P., Newton, R. & Oughton, R. 2001, 'A framework for developing excellence as a clinical educator', *Medical education*, vol. 35, pp. 555–564.

Debates relating to the competencies required by those who have responsibility for educating others abound. The current review of the competency standards for assessors and workplace trainers attests to this, with many different opinions being offered, particularly in relation to the knowledge and attributes of assessors and trainers.

This paper is of interest for two reasons. First, it tackles the issue of the skills required by educators and trainers within a specific profession – the medical profession. Secondly, the authors draw on outcomes-based education as the conceptual basis for their development of a framework for understanding the role of medical educators by describing the outcomes for courses that prepare doctors as educators.

The framework was developed using three methods including a review of the literature, a study of the content of courses that currently prepare teachers for the medical profession and wide consultation with educators.

The framework is presented as three concentric circles. The innermost circle describes the 'technical intelligences' – that is the tasks – which a doctor as teacher must be able to do. These are expressed in terms of seven outcomes (for example, teach large and small groups, teach in a clinical setting, plan learning etc.). The middle circle focuses on the outcomes relating to how educators approach the task of learning. This is expressed in three outcomes:

- intellectual intelligences (understanding the principles of education);
- 2. emotional intelligences (applying appropriate attitudes, ethical understanding and legal awareness in the educational setting); and

3. analytical and creative intelligences (applying appropriate decision-making skills with an evidence-based approach to education.

The outer circle of the model describes the outcomes related to the role of the educator within their organisation and their profession, including their professional and personal development as educators.

The authors conclude the paper with a description of how the framework might be used for a variety of purposes including curriculum design, defining the roles of various types of educators (clinical tutor, specialist advisor etc.), assessing individual learning needs and staff planning.

Oliver, R. & Omari, A. 2001, 'Student responses to collaborating and learning in a web-based environment', *Journal of computer assisted learning*, vol. 17, pp. 34–47.

There continues to be considerable debate on the efficacy of computer-based learning environments, particularly in relation to the opportunities they offer for students to be actively engaged in their learning. The current research literature is somewhat divided, with early studies asserting the superiority of computer-based environments over more conventional environments. These studies are now being questioned, particularly for their generalisability and recognition that the size and nature of the reported gains depended significantly on the classroom-based strategies used in the comparison.

As with many educational innovations, responses to these criticisms have also focused on the implementation process as being critical to the observed outcomes, with little room for any real critique of the technology itself. The study reported in this paper takes up this line of inquiry through an evaluation of an introductory unit of an undergraduate multimedia degree offered at Edith Cowan University.

The introductory unit was designed to use a mixture of multimedia and communication technologies to link teachers and students. A problem-based approach to learning was used to guide the development of the learning environment. The unit consisted of a number of custom designed web tools, including:

- content broken into weekly topics with print and on-line resources to support student research;
- problem-solving tasks which were completed by students working in groups, communicating via e-mail to develop solutions; and
- the use of bulletin boards where students posted their solutions.

Students assessed the work of their peers and tutors also provided feedback and the final grade for the unit.

The evaluation study used an action methodology to gather data from students on the quality of their learning experiences and the factors that influenced the observed outcomes of the learning process. Data were collected using interviews with twenty students and the completion of an online questionnaire.

Results of the study showed that, while some students were satisfied with the web-based learning environment, up to fifty percent of all students reported that the environment was not their preferred learning mode. Further, the study showed that participation in such a learning environment was not enough to develop students' skills as problem-solvers. These outcomes underscore some of the potential problems that teachers face in using web-based learning environments, particularly in relation to supporting learning for students who may find the learning environment particularly difficult to master and the time and effort needed in order that the environment deliver its full potential.

Umble, K., Cervero, R. & Langone, C. 2001, 'Negotiating about power, frames and continuing education: A case study in public health', *Adult education quarterly*, vol. 51, no. 2, pp. 128–145.

This paper builds on the work of Cervero and Wilson in developing a model of the adult education program planning process. Within this model, program planning is viewed as a social activity where people developing programs negotiate personal, social and organisational interests within contexts that are shaped by power relationships.

Previous work by Elgstrom and Riis ('Framed negotiations and negotiated frames', *Scandinavian journal of educational research*, vol. 35, no. 2, 1992, pp. 99–120) distinguished between two different types of negotiation:

- meta negotiations, which attempt to change the 'frame factors'

 that is, the material factors (for example, funding, physical resources, equipment) and the 'ideation structure' (that is, the norms, values, standards and world views) within which program developers operate; and
- substantive negotiations, which determine features such as specific content, audience, format etc.

Within this framework, Elgstrom and Riis conflate negotiations about frame factors with negotiations about power relations. Conversely, studies by Cervero and Wilson illustrate that meta negotiations (defined as negotiations about power relations only) influence substantive negotiations. The authors of this paper report on a study that brings together the work of these two groups of researchers into a framework which is used to examine how meta negotiations about power relations and frame factors and substantive negotiation affect the development of a continuing education program in public health. In particular, the paper focuses on how meta negotiations were conducted in the context of discussions about the audience and content of the program. The findings illustrate:

- how organisational and broader societal factors shaped the basic relationships between the key groups involved in the program planning process and how these relationships, in turn, shaped the material and ideation factors;
- how meta negotiations between staff established the initial power relationships between program development staff;
- the role that meta negotiation played throughout the planning process in terms of bringing about changes to the content and audience for the public health program;
- how particular interests were represented in the negotiations and how power relations shaped these negotiations; and
- the manner in which substantive and meta negotiations shaped the program over time.

This research highlights the importance of program planners using wisely the power they have and being constantly aware of whose interests they serve as they carry out their planning activities.

Wikstrom, B-M. 2001, 'Works of art dialogues: An educational technique by which students discover personal knowledge of empathy', *International journal of nursing practice*, vol. 7, pp. 24–29.

The use of aesthetic knowledge is important in a number of professions, particularly those in the human services field such as nursing, social work and teaching. Aesthetic knowledge is important because it aids the development of particular phenomena such as empathy, compassion and cultural sensitivity. The use of literature, music and art can help students to 'achieve an understanding of the human condition they could not otherwise experience'. In this paper, the author reports on a study undertaken in two university colleges in Sweden where a work of art was used to build nursing students' knowledge of empathy. The study with 428 first year nurses took place over a four-year period.

The selection of the artwork ('The Sick Child' – painted in 1896 by Norwegian artist Edvard Munch) was decided upon using a process that involved the students. The aim of the selection process was to choose a work of art that had a certain degree of ambiguity but that was also not too difficult for students to interpret. The selection process sought to obtain a balance (as far as it was possible) between several characteristics including:

- the degree of openness (in terms of a lack of sharply outlined forms) and closure (it contained figures that were distinct and complete);
- the degree of realism/dramatic action and novelty and surprise.

The work of Van Manen was used to guide the learning process that was characterised by the author as 'experiential-based'. The learning process comprised several phases commencing with a close study of the painting with students responding to a series of questions in writing and small group dialogues. During these processes, students were encouraged to use their imaginations and to combine their experiences, feelings and memories with their impressions of the picture. The group dialogues also provided students with opportunities to discuss the strengths and weaknesses of using the picture to discover self-knowledge of empathy.

The results of the study examining students' written responses and key themes from the small group dialogues provided evidence to assert that a majority were able to 'know' empathy from these activities. The environment in which this discovery process took place was a key factor in the reported outcomes. Relaxed and non-threatening environments involving teacher/student dialogues where students gave their opinions and judgements and teachers listened and received (reversing the usual patterns of student/teacher dialogues) were found to be most important.

Another important factor in achieving the observed outcomes was the degree of ambiguity within the artwork. This was found to be an important tool in stimulating discussion and generating alternative perspectives. Ambiguity also acted as a catalyst for students to engage their imaginations and provided an avenue for them to express their thoughts and feelings in ways that might have been otherwise inhibited.